DOCUMENT RESUME

ED 103 139 RC 008 351

AUTHOR	Till, Thomas; And Others
TITLE	Stages of Industrial Development and Poverty Impact in Nonmetropolitan Labor Markets of the South.
INSTITUTION	Texas Univ., Austin. Center for the Study of Human Resources.
SPONS AGENCY	Manpower Administration (DOL), Washington, D.C.
PUB DATE	Jan 75
NOTE	114p.; Some maps may reproduce poorly
EDRS PRICE	MF-$0.76 HC-$5.70 PLUS POSTAGE
DESCRIPTORS	Comparative Analysis; *Economically Disadvantaged; Economic Development; Employment Trends; *Industrialization; *Labor Market; Manpower Utilization; Manufacturing; Migration; Negroes; *Rural Areas; *Southern States; Tables (Data); Unions
IDENTIFIERS	Indiana

ABSTRACT

Using a developmental stages model, the extent and characteristics of manufacturing development in the nonmetropolitan South between 1940 and 1970 were examined. Focus was on whether industrialization comes in different phases and whether its impact on the rural poor varies during each phase. Nonmetro labor markets (counties more than 50 miles from the central city of a Standard Metropolitan Statistical Area--SMSA) of the South and Indiana were compared. Data were collected through: (1) statistical time-series (mainly the "Census of Manufactures" and the "Census of Population") and (2) field interviews. In each of six multicounty areas (selected because their nonfarm employment had either grown very rapidly in the 1960's or they had both "success" and stagnating counties) industrial development and antipoverty workers were interviewed in July and August 1974 on the process of industrial development and impact on the poor in their area. Some findings were: (1) distinct stages existed in industrial characteristics, poverty impact, immigration, and community industrial planning; (2) two phases of industrial development were low-wage and labor-intensive and medium-wage and less labor-intensive; and (3) the two phases of industrialization differed in poverty impact--a greater percentage of workers hired were poor in the first phase than in the second. (NQ)

ED103139

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

BEST COPY AVAILABLE

STAGES OF INDUSTRIAL DEVELOPMENT AND POVERTY IMPACT IN NONMETROPOLITAN LABOR MARKETS OF THE SOUTH

Final Report
Grant 21-48-74-24
January, 1975

Thomas Till
Allen Thompson
Ray Marshall

This report was prepared for the Manpower Administration, U.S. Department of Labor, under research and development Grant Number 21-48-74-24. Since grantees conducting research and development projects under Government sponsorship are encouraged to express their own judgment freely, this report does not necessarily represent the official opinion or policy of the Department of Labor. The grantee is solely responsible for the contents of this report.

Thomas Till is Assistant Professor of Economics at Franklin College, Franklin, Indiana. Allen Thompson is Assisant Professor of Economics at the Whittemore School of Business and Economics, University of New Hampshire at Durham. Ray Marshall is Professor of Economics and Director of the Center for the Study of Human Resources, University of Texas at Austin.

CENTER FOR THE STUDY OF HUMAN RESOURCES
WAGGENER HALL 14
THE UNIVERSITY OF TEXAS
AUSTIN, TEXAS 78712
(512) 471-7891

0002

STANDARD TITLE PAGE FOR TECHNICAL REPORTS	1. Report No. DLMA	2. Govt. Accession No.	3. Recipient's Catalog No.

4. Title and Subtitle
Stages of Industrial Development and Poverty Impact in Nonmetropolitan Labor Markets of the South

5. Report Date
January, 1975

6. Performing Organization Code

7. Author(s)
Thomas Till; Allen Thompson; and Ray Marshall

8. Performing Organization Rept. No.

9. Performing Organization Name and Address
Center for the Study of Human Resources
University of Texas
Austin, Texas 78712

10. Project/Task/Work Unit No.

11. Contract/Grant No.
21-48-74-24

12. Sponsoring Agency Name and Address
U.S. Department of Labor
Manpower Administration
Office of Research and Development
1111 20th St., N.W. Washington, D.C. 20210

13. Type of Report & Period Covered
Final

14. Sponsoring Agency Code

15. Supplementary Notes

16. Abstracts
This report uses a developmental stages model to analyze the extent and characteristics of manufacturing development in the nonmetropolitan South, 1940-1970. Statistical time-series and field-research disclose distinct stages in industrial characteristics, poverty impact, inmigration, and community industrial planning.

17. Key Words and Document Analysis. 17a. Descriptors

Demand (Economics)
Earnings
Economic analysis
Economic development
Education (includes training)
Employment
Labor
Manpower
Manpower utilization
Manufacturing
Mobility
Negroes
Population migration
Rural areas
Skilled workers
Supply (economics)
Unionization
Unskilled workers

17b. Identifiers/Open-Ended Terms

17c. COSATI Field/Group

18. Distribution Statement	19. Security Class (This Report)	21. No. of Pages
Distribution is unlimited. Available from National Technical Information Service, Springfield Va., 22151.	UNCLASSIFIED	114
	20. Security Class (This Page) UNCLASSIFIED	22. Price

FORM CFSTI-35 (4-70)

USCOMM-DC 85002-P70

Acknowledgements

I am especially grateful to Ray Marshall for his encouragement, comments, and editorial revision of this report. He also contributed the Preface, which positions this report within the wider topic of Southern human resource development in nonmetro areas. Allen Thompson generously supplied Section III. I am responsible for the rest. I deeply appreciate the comments of Niles Hansen, Etta Williamson, Robert Glover, Roy Van Cleve, and Curtis Toews. Their comments forced me to rethink several points -- a healthy corrective. Finally, I appreciate the typing assistance of Louise Bond and Charlie Crunk.

Thomas Till
January, 1975

Preface

As is well known, the South became the most economically backward part of the United States because of the emergence of a relatively static agrarian system. This system produced a number of economic and socio-political institutions which retarded Southern economic growth at a time when other regions were making significant progress.

These traditional institutions were incompatible with industrialization which was accelerated in the South after 1880. Nonagricultural industrialization therefore has tended to cause the South's economic and socio-political institutional structure to converge with that of the rest of the United States, although many aspects of the traditional South remain, particularly in terms of conditions in rural areas and the problem of institutionalized racial discrimination.

Economic Growth, Incomes, and Employment

Although the per capita incomes of all Southerners have been lower than those of non-southerners for more than a century and a half, rural per capita incomes have been consistently lower than those in urban areas and the incomes of rural blacks have consistently been lowest of all. Many urban-rural and racial income differentials have persisted in spite of significant improvement in the relative economic position of the South as a region, because virtually all of the benefits of recent Southern economic growth have accrued to urban whites whose economic position is roughly equal to that of urban whites outside the South, especially when allowances are made for the lower relative costs of urban living in the South. In other words, the economic development problem in the contemporary South is not the absence of economic growth but rather the fact that the benefits and costs associated with recent income growth have been distributed very unevenly.

This uneven distribution manifests itself in the following ways:

(1) Small farmers were displaced disproportionately, and black farmers were displaced at a much higher rate than white farmers.

(2) The number of hired farm workers dropped sharply from 1,043,000 in 1950 to 513,000 in 1969. This decline of 530,000 amounts to roughly 453,000 full-time wage jobs.

(3) Southern agrarians have experienced increasing underemployment, especially blacks. In 1950, 2.74 million white workers filled 1.96 million jobs, i.e., there were about seven jobs for every 10 workers. By 1969, 1.19 million white farm workers filled .59 million jobs, meaning less than five jobs for 10 workers. There were roughly 767,000 non-white family farm workers in 1960, and 540,000 non-white full-time jobs, about the same ratio of workers to jobs as for whites. However, by 1969, there were about 158,000 non-white workers and only 73,000 full-time jobs, a ratio of about 4.6 jobs for every 10 workers.

(4) There has been a significant shift to non-agricultural employment as a source of income for farm families. However, black farm families have been less successful than whites in increasing or maintaining their incomes either from agriculture or off-farm sources.

(5) There has been mixed evidence with respect to the impact of rural industrialization in the South on the job opportunities of local area residents, especially the rural poor. For example, a study of the impact of a Kaiser Aluminum plant located in rural West Virginia in 1957, found that of the 4,000 jobs created by the plant, only 600 went to local people -- the rest went to skilled outsiders. Similar findings have been reported in other studies of the impact of rural industrialization in other parts of the South. However, evidence from studies by the ERS, reported below, show mixed results with respect to the impact of rural industrialization on the poor.

(6) And finally, there is substantial evidence that blacks have not shared proportionately in recent rural non-agricultural employment growth in the rural South.

Poverty

Although the South, defined as the 11 states of the Old Confederacy plus Kentucky and Oklahoma, contained only 27.5 percent of the total U.S. population in 1970, it had 42.5 percent of the nation's poor. The rural non-farm South had 9.0 percent of the population but 18.3 percent of the nation's poverty. The rural farm South, with 1.5 percent of the total

population, had 2.9 percent of the nation's poor. To put these same data in a slightly different perspective, the South, the rural non-farm South, and the rural farm South had respectively, 54 percent, 53 percent and 98 percent more poverty than would have been the case if poverty were equally distributed among all regions of the nation.

Although there were more poor whites (3,375,100) than poor blacks (2,123,100) in the rural South in 1969, several factors combine to cause black rural poverty in the South to be more severe than white rural poverty. First of all, the incidence of poverty among rural blacks is greater than among rural whites. The average black rural Southerner is roughly three times as likely to be poor as his white counterpart. Secondly, the average poor black family is more deeply impoverished than the average poor white family. Thirdly, racial price discrimination in consumer and resource markets further reduces the real incomes of poor blacks. Fourthly, black families at any observed income level have substantially less wealth than white families.

Outmigration

As a consequence of the growth of non-farm employment, white outmigration from the rural South has been virtually eliminated. However, this growth has had no appreciable effect upon black outmigration. These current migration trends are widening the educational and economic gaps between rural whites and rural blacks and between black outmigrants and black non-migrants. Clearly, successful economic development aimed at blacks in the South would reduce black outmigration.

Education

Both formal and informal learning opportunities for rural Southerners are grossly inferior to those of the general population. Rural Southerners have the highest rates of illiteracy, the lowest levels of educational attainment and the least opportunity to acquire job-related or general knowledge through such non-formal means as the mass media, apprenticeship, adult education programs and manpower training programs. Programs offered by the Extension Service of the U.S. Department of Agriculture through the land grant college system have been a useful source of non-formal education for some rural Southerners, but these programs have discriminated against the poor, and especially the black poor.

Manpower Training

Manpower programs, which prepare people for present and future jobs, could play an important role in human resource development in the rural South. However, in spite of its potential, manpower training actually has been very limited in rural areas. Its effectiveness has been limited because of small size, inadequate staffs and equipment as well as the very restricted opportunities for effective on-the-job training.

Health

Of all the measures required for increased development and utilization of human resources in the rural South, none is more important than health which is perhaps the best overall indicator of the quality of life. The inferior health status of rural Southerners can be easily documented. The typical rural Southerner is far more likely to die at birth, to be malnourished, to contract a disease which could be easily prevented by modern medicine, to live in unsound housing, and to drink contaminated water, than his urban counterpart. The health problems of rural Southerners pervade all age groups and seriously undercut the productivity of the rural labor force. For example, the number of days lost from work due to disabling or debilitating health conditions is 20 percent higher in the rural South than elsewhere.

In spite of the fact that the health problems of rural Southerners are more serious than those of other Americans, the rural South has not received its proportionate share of federal expenditures for health. For example, although 45 percent of those eligible for Medicaid lived in the rural South in 1970, only 16 percent of Medicaid funds were spent in the South.

Welfare

Because the rural South contains a disproportionately large number of poor people who cannot or should not work, welfare income maintenance programs are an important adjunct to an effective human resources development and utilization program for this region. Of greatest importance for the future productivity of rural Southerners are the programs which provide direct payments to families which are unable to provide for the care of their children without outside assistance.

Anti-discrimination

It is apparent that virtually every measure of material well-being shows that rural blacks in the South are worse off than their white counterparts. The basic cause of the disparities in the levels of material well-being for rural blacks and whites in the South is institutionalized racial discrimination which restricts the range of economic opportunities available to rural blacks and which is responsible for the systematic underinvestment in black human resource development which prevents many rural blacks from taking effective advantage of the limited opportunities which are available to them.

Purpose

The purpose of the present study is to explore in greater depth the implications of nonmetropolitan industrialization for the rural poor. The particular question explored is whether or not industrialization comes in different phases and whether or not the impact of industrialization on the rural poor varies during each phase.

Ray Marshall

TABLE OF CONTENTS

SECTION		PAGE
I.	Introduction	1
II.	Research Results	5
III.	Trends in the Income of Farmers	30
IV.	Reflections on Policy	43
	Appendix A Maps of Southern Nonmetro Population, Total Employment and Manufacturing Employment	46
	Appendix B Employment Changes in "Success" and "Failure" Counties in the Border South, 1947-1971	50
	Appendix C Employment Trends in Six Southern Case-Study Areas, 1940-1970	70
	Appendix D Indiana Comparison Study	79
	Bibliography	91

0010

LIST OF TABLES

TABLE		PAGE
1	The Extent of Rural Industrialization in Thirteen Southern States: Total Nonfarm Employment and Manufacturing Employment Changes of Southern Counties, 1959-1969, by Distance from the Nearest SMSA	3
2	The Border South, A Summary Table: Rates of Change of Manufacturing Employment, 1947-1971	6
3	Six Southern Case-Study Areas: Employment Patterns by Key Industries, 1940-1970	7
4	Criteria for Growth Performance on Map 1 Growth Performance by Groups of Counties	8
5	Ten-State South: Leading Manufacturing Industries, By Share of Total Manufacturing Jobs, 1959-1969, In Nonmetro Labor Markets	11
6	Inmigration of Workers, Four Study Areas, 1970	19
7	Impact of Job Development on Poverty Status, Four Study Areas, 1965-1970	24
8	Previously Poor Resident Households Out of Poverty in 1970, Four Study Areas	27
9	Income for Farm Operator Family by Major Source and by Value of Sales Classes, 1960-72	32, 33, 34
10	Percentage of Income from Farming Operations by Value of Sales Class for Selected Years 1960-1972	35
11	Income of Farm Families by Source for Selected Years 1960-1972 in Constant Dollars (1967=100)	36
12	Distribution of Southern Farms by Days of Off-Farm Work and Economic Class of Farm, 1959-1969	37

0011

TABLE		PAGE
13	Labor Force Participation of Married Women, 1970	40
14	Occupational Distribution of Males with Farm-Related Income, 1970	41
15	Occupational Distribution of Married Women in the U.S., 1970	42
16	Industrial Distribution of Experienced Labor Force, Families with Farm Self-Employed Income	45
B-1	List of Included Counties (Total: 113)	52, 53, 54
B-2	The Border South, A Summary Table: Change of Manufacturing Employment at the SIC Two-Digit Level, 1947-1971, For Selected Industries	55
B-3	The Border South: Total Manufacturing Employment, 1947-1971	56
B-4	Arkansas: Total Manufacturing Employment, 1947-1971	57
B-5	Kentucky: Total Manufacturing Employment, 1947-1971	58
B-6	North Carolina: Total Manufacturing Employment, 1947-1971	59
B-7	Tennessee: Total Manufacturing Employment, 1947-1971	60
B-8	Virginia: Total Manufacturing Employment, 1947-1971	61
B-9	The Border South: Manufacturing Employment at the SIC Two-Digit Level, 1947-1971, Combined Success and Failure Counties	62

0012

TABLE		PAGE
B-10	The Border South: Manufacturing Employment at the SIC Two-Digit Level, 1947-1971, For Success Counties	63
B-11	The Border South: Manufacturing Employment at the SIC Two-Digit Level, 1947-1971, For Failure Counties	64
B-12	Arkansas: Manufacturing Employment at the SIC Two-Digit Level, 1947-1971	65
B-13	Kentucky: Manufacturing Employment at the SIC Two-Digit Level, 1947-1971	66
B-14	North Carolina: Manufacturing Employment at the SIC Two-Digit Level, 1947-1971	67
B-15	Tennessee: Manufacturing Employment at the SIC Two-Digit Level, 1947-1971	68
B-16	Virginia: Manufacturing Employment at the SIC Two-Digit Level, 1947-1971	69
C-1	List of Counties Included in Six Case-Study Areas	72
C-2	Appalachian Case-Study Area: Employment Patterns by Key Industries, 1940-1970	73
C-3	Central Louisiana Case-Study Area: Employment Patterns by Key Industries, 1940-1970	74
C-4	Northeast Mississippi Case-Study Area: Employment Patterns by Key Industries, 1940-1970	75
C-5	Central Tennessee Case-Study Area: Employment Patterns by Key Industries, 1940-1970	76
C-6	Northwest Arkansas Case-Study Area: Employment Patterns by Key Industries, 1940-1970	77
C-7	Southeast Mississippi - Southwest Alabama Case-Study Area: Employment Patterns by Key Industries, 1940-1970	78

0013

TABLE		PAGE
D-1	The Extent of Nonmetropolitan Industrialization in Indiana: Nonfarm and Manufacturing Employment, 1959-1969, By Distance from the Nearest SMSA and by Size of Largest City	80
D-2	Population Changes in Indiana, 1960-1970, by Distance From Nearest SMSA and by Size of Main City	82
D-3	Industrialization in Indiana and the South, 1959-1969, By Distance From the Nearest SMSA and by Size of the Largest City	83
D-4	Industrialization in Northern and Southern Indiana, 1959-1969, By Distance From the Nearest SMSA and by Size of Largest City	85
D-5	Southern Indiana: Leading Industries, By Share of Total Nonfarm and Manufacturing Employment, 1959-1969, in Counties Over Fifty Miles from an SMSA	86
D-6	Southern Indiana: Leading Industries, by Share of Total Nonfarm or Manufacturing Employment, 1959-1969, in All Nonmetro Counties	88
D-7	Southern Indiana and the South: Comparative Industrial Structure of the South, of Indiana Counties Over 50 Miles from an SMSA, and of All Indiana Nonmetro Counties, by Selected Industries	89

0014

LIST OF MAPS

MAP		PAGE
1	Growth Performance of Southern Multi-County Nonmetro Areas, 1959-1969	9
A-1	Population Changes in Southern SMSA and Distant Nonmetro Counties, 1960-1970	47
A-2	Total Nonfarm Employment Changes in Southern SMSA and Distant Nonmetro Counties, 1959-1969	48
A-3	Manufacturing Employment Changes in Southern SMSA and Distant Nonmetro Counties, 1959-1969	49
B-1	Counties Included in Time-Series of Industrial Development, Growth Performance of Multi-County Nonmetro Areas More than Fifty Miles from an SMSA	51
C-1	Six Case-Study Areas	71

0015

Stages of Industrial Development and Poverty Impact
in Nonmetropolitan Labor Markets of the South

I. INTRODUCTION

In 1889 a funeral inspired Henry Grady's complaint about the industrial backwardness of the South:

> They cut through the solid marble to make his grave, and yet a little tombstone they put above him was from Vermont. They buried him in the heart of a pine forest, and yet the pine coffin was imported from Cincinnati. They buried him within touch of an iron mine, and yet the nails in his coffin and the iron in the shovel that dug his grave were imported from Pittsburgh. . . . They buried him in a New York coat and a Boston pair of shoes and a pair of breeches from Chicago and a shirt from Cincinnati. The South didn't furnish a thing on earth for that funeral but the corpse and the hole in the ground.[1]

Today the words sound rather quaint, for the rapid industrial growth of the South in recent decades is well-known. The undertaker would have no trouble outfitting the corpse in Southern manufactures.

However, considerable controversy arose in the 1960's over the question whether metropolitan or nonmetropolitan areas could attract industry without impractically massive subsidies.[2] Some held that the locational advantages of large cities for nonmanufacturing firms were so great that generally

---

1 Quoted in Glenn E. McLaughlin and Stefan Robock, Why Industry Moves South (Washington, D.C.: National Planning Association Committee of the South, 1969), p. 3

2 For the skeptical view, see Brian J. Berry, Spatial Organization and Levels of Welfare, paper prepared for the Economic Development Administration Research Conference (Washington, D.C.: February, 1968). The opposing view is presented by Claude C. Haren, "Rural Industrial Growth in the 1960's, American Journal of Agricultural Economics, Vol. 52 (August, 1970), pp. 431-437.

only nonmetro counties within commuting distance of SMSA's could develop manufacturing jobs.[3] The dispute had great importance for policy, since the main anti-poverty and anti-unemployment strategy of agencies such as the U.S. Economic Development Administration and local Chambers of Commerce was to attract industry, especially manufacturing jobs.

Recent research indicates that those who believed in the practical possibility of nonmetro industrialization in the South were clearly incorrect.[4] Comparison of manufacturing growth in Southern counties over 50 miles from an SMSA with that in SMSA's reveals that the distant nonmetro counties not only grew at a faster rate in the 1960's than the SMSA's, but also scored impressive gains in manufacturing employment. (Table 1.)[5]

But how does industrialization take place in nonmetro labor markets? Why does one area succeed and another fail? Does it occur in stages? And what benefit, if any, do the

---

[3]Wilbur R. Thompson, A Preface to Urban Economics (Baltimore: Johns Hopkins, 1965), pp. 33-36; and Berry, op. cit.. However,the stages of industrialization in this report can be regarded as corallaries to Thompson's trickle-down theory of the spatial-temporal industrial development process (confer Thompson, op. cit., pp. 39-40).

[4] Haren, op. cit. and Till, "The Extent of Industrialization in Southern Nonmetro Labor Markets in the 1960's," Journal of Regional Science 13 (December, 1973), pp. 453-461.

[5] Further data on Southern sub-regional and state patterns can be found in Till, Rural Industrialization and Southern Rural Poverty in the 1960's (unpublished Ph.D. dissertation, University of Texas at Austin, 1972; available from University Microfilm, Ann Arbor, Michigan), Chapter 2.

Table 1

The Extent of Rural Industrialization in Thirteen[1] Southern States: Total Nonfarm Employment[2] and Manufacturing Employment Changes of Southern Counties, 1959-1969, by Distance from the Nearest SMSA

	Number of Counties	Total Nonfarm Employment 1959	Total Nonfarm Employment Change, 1959-1969		Manufacturing Employment 1959	Manufacturing Employment Change, 1959-1969	
			Number	Percent		Number	Percent
SMSA Counties: Total	153	5,660,076	2,811,677	49.7	1,604,903	701,916	43.7
Counties 0-50 Miles From SMSA: Total	595	2,050,630	989,771	48.3	963,604	505,508	52.5
Counties Over 50 Miles From SMSA: Total	553	1,379,489	674,345	48.9	505,585	308,972	61.1

[1] Texas, Oklahoma, Arkansas, Louisiana, Mississippi, Tennessee, Alabama, Georgia, Florida, South Carolina, North Carolina, Virginia, Kentucky.

[2] The County Business Patterns definition excludes government workers, domestic servants, and the self-employed.

SOURCE: Nonfarm and manufacturing employment from County Business Patterns, 1959 and 1969. Since individual county data in the 1959 County Business Patterns were not provided for the states of Texas, Georgia, and Kentucky, the individual estimates of 1959 total nonfarm and manufacturing employment used for these states were those generously provided by Claude Haren of the Economic Research Service of the U.S. Department of Agriculture. State Unemployment Insurance data and the 1958 Census of Manufacturing were used to split the combined data of the County Business Patterns into these individual county estimates.

poor receive? These are the main general questions investigated in the research.

The findings do not pertain to the whole United States. Different patterns may exist in the North, the West, and the Plain States.[6] The only areas investigated in this research are the nonmetro labor markets[7] of the South,[8] with an examination of Indiana for comparison purposes. (Indiana was chosen because of proximity to the author.)

Statistical time-series (drawing mainly on the Census of Manufactures and the Census of Population) are used to compare the rates of job growth over the decades since 1940. However, the main methodology used were field interviews. Six multi-county areas were chosen from Map 1, generally because their nonfarm employment had either grown very rapidly in the 1960's or because they had "success" counties and stagnating ones as well. They were also selected to represent different areas of the South. (The areas chosen, and the counties included, can be seen on Map C-1 and Table C-1). In each area industrial development and anti-poverty workers were interviewed on the process of industrial development and impact on the poor in their area. Most of the interviews were conducted in July and August, 1974. Evidence from case studies and field interviews is, of course, never definitive. But it can reveal the concrete richness and variety of the development process, and assure that

---

[6]Bird indicates that quite different patterns occurred in sparsely settled nonmetro areas, and in the Great Plains and Mountain States. (Alan Bird, Migration and its Effect on Agriculture and Rural Development Potential, Washington, D.C.: U.S. Department of Agriculture, 1972).

[7]Nonmetro labor markets are operationally defined as counties more than 50 miles from the central city of an SMSA, since workers in closer nonmetro counties commute extensively to SMSA jobs.

[8]In this report the South stands for the 13-state region composed of the states of the Confederacy plus Kentucky and Oklahoma; thus, Alabama, Arkansas, Florida, Louisiana, Georgia, Kentucky, Oklahoma, Mississippi, North Carolina, South Carolina, Tennessee, Texas, and Virginia are included.

0013

explanatory academic models are not irrealistically at loggerheads with reality. The conclusions of this report are based primarily on these interviews, and secondarily on statistical time-series of employment. (The list of these interviewed may be found at the end of this report.)

II. RESEARCH RESULTS

A. The Industrialization Process.

First, the greatest boom decade since World War II for manufacturing in Southern nonmetro labor markets was the 1960's. Of roughly 800,000 manufacturing jobs in 1969, slightly more than 300,000 had been gained since 1959 (Table 1). Also, data for "success" and "failure" counties in the border South reveal that the highest rates of growth since 1947 were between the late fifties and late sixties (Table 2). The case study counties selected for field research show the same trend (Table 3).[9] Second, not all nonmetro areas benefited from this growth. Previous research has shown that the border South, especially the white, hill-country areas, gained most of the jobs. Delta areas of the border South, deep South areas, and the plains areas of western Texas and Oklahoma generally stagnated (Table 4 and Map 1).[10]

Third, the main attraction seems to have been the labor force, specifically, the lower wage levels, abundant labor

---

[9]Several officials confirmed that the greatest growth in their areas had been in the 1960's [Interviews with Cotton (Chamber of Commerce, N.E. Miss.); Barrett (Employment Security Center, Tenn.); Fields, (State Ind. Development Board) and Christy (Chamber of Commerce, N.W. Ark.)]. For fuller references to these and following interviews, please consult the "List of Interviews."

[10]Tests showed that the nonmetro South had lower wage levels than the rest of the South or the nation as a whole (confer Till, Journal of Regional Science, loc. cit., p. 460).

Table 2

The Border South[a], A Summary Table:
Rates of Change of Manufacturing Employment, 1947-1971

Counties		Annual Rate of Change, Total Manu. Employment		
Growth Category	Number	1947-58	1958-67	1967-71[b]
Total	113	2.5%	5.6%	4.3%
Success	86	2.6	5.9	3.3
Failure	27	1.8	-2.4	16.0

[a] 100% coverage of "success" and "failure" growth counties in Arkansas, Kentucky, North Carolina, Tennessee, and Virginia. For a list of these counties, confer Appendix B, Map B-1 and Table B-1.

[b] Less reliance should be placed on these rates because of comparability problems between County Business Patterns and Census of Manufacturers.

SOURCES: (1) For 1947, 1958, and 1967 employment - U.S. Department of Commerce, Bureau of Census. Census of Manufacturers. Washington, D.C.: U.S. Government Printing Office.

(2) For 1971, United States Department of Commerce, Bureau of Census. County Business Patterns. Washington, D.C.: U.S. Government Printing Office.

0021

BEST COPY AVAILABLE

Table 3

Six Southern Case-Study Areas[a]: Employment Patterns
By Key Industries, 1940-1970

Category	Number of Counties	EMPLOYMENT									
				Change, 1940-1950			Change, 1950-1960			Change, 1960-1970	
		1940	1950	Number	Percent	1960	Number	Percent	1970	Number	Percent
I. All Success Counties	25										
Total		171,577	197,279	25,702	15.0	191,998	-5,281	-2.7	238,308	46,210	24.1
Agriculture		76,647	57,693	-18,954	-24.7	30,691	-27,002	-46.8	11,398	-19,293	-62.9
Mining		1,174	1,944	770	65.6	1,804	-140	-7.2	2,256	452	25.1
Manufacturing		23,904	33,325	9,421	39.4	45,551	12,226	36.7	71,742	26,191	57.5
II. All Failure Counties	18										
Total		135,370	143,852	8,482	6.3	120,003	-23,849	-16.6	121,011	1,008	0.8
Agriculture		46,220	35,048	-11,172	-24.2	15,571	-19,477	-55.6	7,579	-7,992	-51.3
Mining		30,958	31,761	803	2.6	14,636	-17,125	-53.9	10,931	-3,705	-25.3
Manufacturing		14,555	19,213	4,658	32.0	19,416	203	1.1	23,416	4,000	20.6
III. All Counties Counties	43										
Total		306,947	341,131	34,184	11.1	312,001	-28,320	-8.3	359,219	47,218	15.1
Agriculture		122,867	92,741	-30,126	-24.5	46,262	-46,479	-50.1	18,977	-27,285	-59.0
Mining		32,132	33,705	1,573	5.0	16,440	-17,265	-51.2	13,187	-3,253	-19.8
Manufacturing		38,459	52,538	14,079	36.6	64,967	12,429	23.7	95,158	30,191	46.5

[a]The six areas are the Central Appalachians (Kentucky, Tennessee, Virginia, and North Carolina); Central Tennessee; Northwest Arkansas; Central Louisiana; Southeast Mississippi-Southwest Alabama; and Northeast Mississippi. For the list of counties in each group, confer Appendix C, Map C-1, and Table C-1.

SOURCE: U.S. Department of Commerce, Bureau of the Census. Census of Population (1940, 1950, 1960, and 1970). Washington, D.C.: Government Printing Office.

0022

Table 4

Criteria for Growth Performance on Map 1

Growth Performance by Groups of Counties[a]

Category	Failure Counties	Success Counties
Population Change, 1960-1970	At least 75 percent of counties lost population	At least 75 percent of counties gained population 20 percent of counties grew faster than the nation (13.3 percent)
Manufacturing Change, 1959-1969	50 percent grew less than nation (34.5 percent) 20 percent had absolute decline	66 2/3 percent grew twice as fast as nation (over 69 percent) 90 percent grew faster than nation (34.5 percent)
Total Nonfarm Employment Change, 1959-1969	66 2/3 percent grew less than the nation (34.5 percent) 25 percent had absolute decline	50 percent grew twice as fast as nation (over 49.2 percent) 75 percent grew faster than nation (over 24.6 percent)

[a] On Map 1, since the concern is with nonmetro labor markets, SMSA counties and those less than 50 miles from a metro area are left blank. Also, omitted are areas whose growth performance in the 1960's was mixed. Consequently, only nonmetro labor markets of conspicuous growth success or stagnation are indicated.

0025

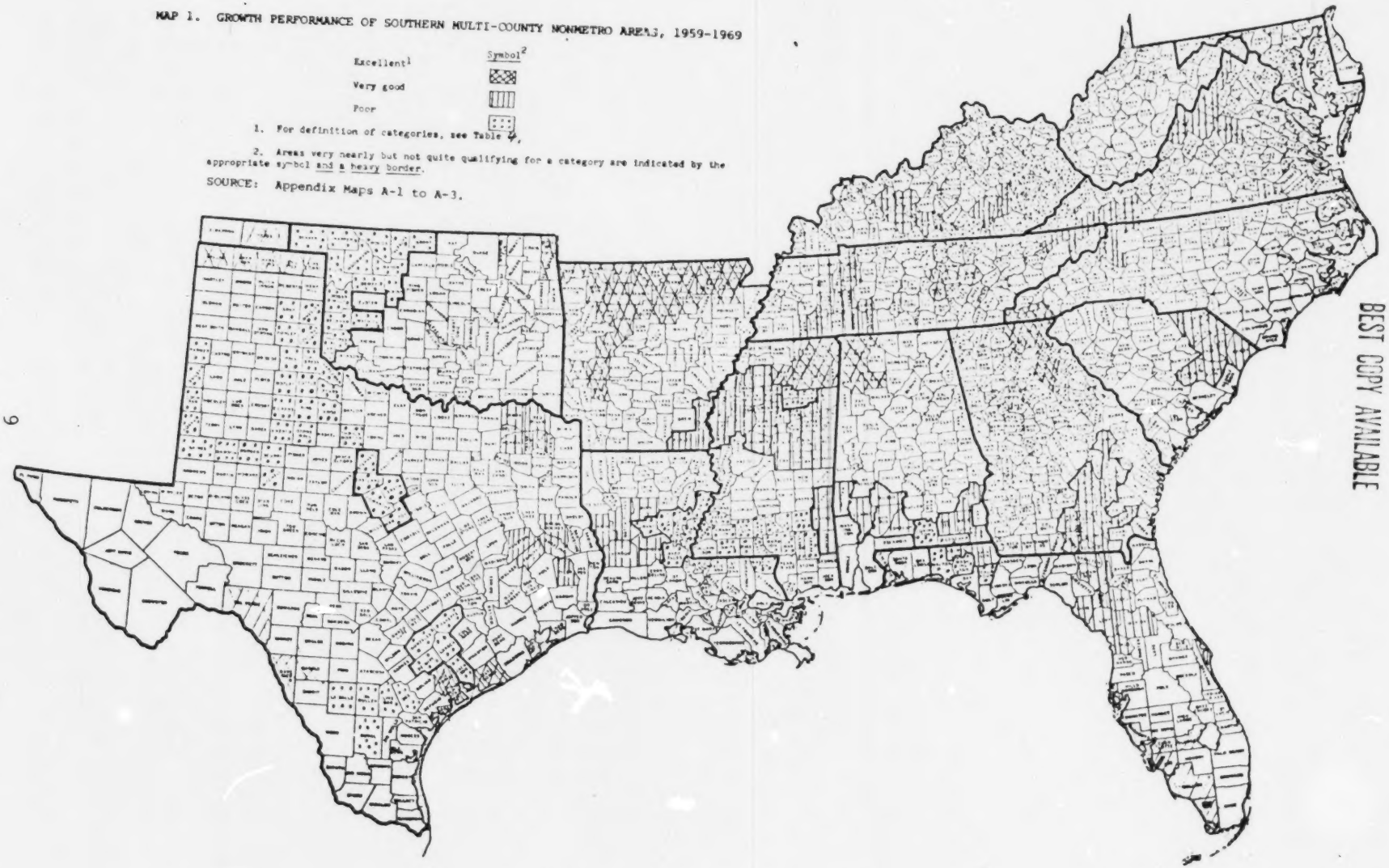
MAP 1. GROWTH PERFORMANCE OF SOUTHERN MULTI-COUNTY NONMETRO AREAS, 1959-1969

	Symbol[2]
Excellent[1]	
Very good	
Poor	

1. For definition of categories, see Table 4.

2. Areas very nearly but not quite qualifying for a category are indicated by the appropriate symbol and a heavy border.

SOURCE: Appendix Maps A-1 to A-3.



BEST COPY AVAILABLE

supply and the absence or relative weakness of unions.[11] The border South also was preferred because of greater closeness to markets and the reputation of having a "prime work-force" (i.e., people accustomed to hard work, long hours, and disinclined to unionize). Also, there was general agreement that local leadership to obtain industry was more vigorous in the hill-country border South in the 1960's.[12]

Fourth, specific stages of development ordinarily can be discerned. Most areas start out specializing in agriculture. An alternative in heavily-wooded areas is timber, where small logging camps and sawmills were the main manufacturing activities. Since farm and logging-sawmill jobs have declined greatly, and outmigration was not sufficient to clear the market of excess labor, this resource-oriented stage led to a large labor surplus. Relative labor surpluses and lower wage levels attracted marginal, labor-intensive manufaucturing from the high-wage, unionized North. The most conspicuous of these marginal activities were in textiles, apparel and shoe manufacturing. Thus, the first phase of industrial development was (and is) typically low-wage and labor-intensive, which -- whatever its disadvantages -- accustoms the labor force to basic habits of factory discipline. This in turn helps attract primarily labor-oriented, medium-wage and more capital-intensive manufacturing like electrical and nonelectrical machinery and transportation plants that moved to the nonmetro South in large number for the first time in the 1960's[13] (Table 5).

---

[11] Interviews with Christy, Chamber of Commerce, N.W. Arkansas; Newcomb, S.E. Mississippi Economic Development District; and George, Tyrone Hydraulics, N.W. Mississippi.

[12] Interviews with Wilkerson (N.W. Arkansas Economic Development District); Neel and Newcomb (S.E. Mississippi Economic Development District). The border South comprises the states of Arkansas, Kentucky, Tennessee, North Carolina and Virginia.

[13] Everyone agreed that the low-wage firms had come first, and that it was natural for this to lead to better paying firms. However, there was considerable disagreement over whether this low-wage stage could be skipped.

Table 5

Ten-State South: Leading Manufacturing Industries, By Share of Total Manufacturing Jobs, 1959-1969, In Nonmetro Labor Markets

1959			Change, 1959-1969			1969		
SIC Number And Industry	Share		SIC Number And Industry	Share		SIC Number And Industry	Share	
	Percent	Number		Percent	Number		Percent	Number
Total	100.0	383,879	Total	100.0	239,222	Total	100.0	623,101
23-Apparel	17.7	67,964	23-Apparel	24.2	57,773	23-Apparel	20.2	125,737
24-Lumber	17.5	67,088	36-Electrical Machinery	12.7	30,419	24-Lumber	9.9	61,854
20-Food	11.0	42,045	37-Transportation Equipment	8.9	21,301	20-Food	8.4	52,398
22-Textiles	9.7	37,058	28-Chemicals	8.5	20,264	28-Chemicals	8.3	51,961
28-Chemicals	8.3	31,697	25-Furniture	6.3	15,163	22-Textiles	7.7	47,923
26-Paper	6.3	24,142	35-Nonelectrical Machinery	4.5	10,664	36-Electrical Machinery	5.9	36,604
31-Leather	3.2	12,169	22-Textiles	4.5	10,865	25-Furniture	4.3	26,783
25-Furniture	3.0	11,620	20-Food	4.3	10,353	26-Paper	4.4	27,401
33-Primary Metals	1.8	6,938	30-Rubber and Plastic Products	3.9	9,369	37-Transportation Equipment	3.9	24,426
36-Electrical Machinery	1.6	6,185	34-Fabricated Metals	3.9	9,203	31-Leather	3.0	18,742
34-Fabricated Metals	1.6	5,971						

SOURCE: U.S. Department of Commerce, Bureau of Census. County Business Patterns, 1959, 1969. Washington, D.C.: U.S. Government Printing Office.

0020

BEST COPY AVAILABLE

Thus we have two phases of industrial development -- the first low-wage and labor-intensive; the second, medium-wage and less labor-intensive.[14]

Fifth, these two phases seem to have distinct characteristics concerning unionization. In the low-wage stages, unions are either weak or nonexistent. Fierce competition leads these companies to be vigorously anti-union; and the workers' low skill and education levels, labor surpluses, and the ease with which these labor intersive industries can move to other areas makes unionization almost impossible.[15] In fact, scattered evidence shows that to be known as a union town -- especially one characterized by frequent work stoppages or violence -- is a definite obstacle to development.[16] In the medium-wage phase the situation changes. Here usually one-third to one-half of the manufacturing labor-force is organized.[17] These

---

[14]Other sequences occur (they will be noted later). But they are exceptions to this general rule. The exceptions normally concern firms which are resource-oriented in their locational decisions.

[15]For further evidence on this point see: Ray Marshall's Labor in the South, (Cambridge, Massachusetts: Harvard University Press, 1967).

[16] This was considered to be one of the prime problems of the eastern Kentucky coal area, with its history of conflict between the United Mine Workers and the owners (interviews with Fields [Kentucky State Industrial Development Agency] and Forester [Employment Security Bureau, Harlan, Kentucky]).

[17] Roughly one-third of the factory labor force in Cookeville was unionized; one-half in Fayetteville; 40 percent in Hattiesburg, Mississippi (interviews with Leslie [Chamber of Commerce, Central Tennessee]; Christy [Chamber of Commerce, N.W. Arkansas]; and Runnels [Industrial Development Board, S.E. Mississippi]).

0027

companies are generally less resistant to unionization, and the larger concentration of plants makes unions drives more rewarding. Also, the labor surplus is usually smaller. Thus, unionization seems to take care of itself, the labor force gradually unionizing as development proceeds.[18] However, even in this second phase, unions are far weaker than in the North.[19]

Sixth, community planning for industrial development also seems distinctly different in the two phases. Initially communities are willing to accept any financially solid firm, since their need of jobs is so desperate.[20] Given the tendency for apparel and shoe factories to demand large subsidies, there is the most danger in this stage that communities will "pay too much" for the prospective plant. In the second phase, however, the situation is different. Industrial planners become much more selective. Apparel and other low-wage firms generally are not welcome. Also, lower subsidies are provided -- often only the offfer of revenue-bond financing.[21]

---

[18]Several agreed that it was a process which naturally happened, and that better-wage plants are not concerned about the presence of unions (interviews with East [1st Tennessee-Virginia Economic Development District]; Christy [Chamber of Commerce, N W. Arkansas]; and Leslie [Chamber of Commerce, Central Tennessee]).

[19]In Cookeville a few apparel companies had closed down their plants rather than accede to union demands (interview with Carr [Upper Cumberland Economic Development District, Central Tennessee]). In Fayetteville, although the manufacturing labor force was one-half unionized, the claim was that the unions did not exist where plants strongly opposed them (interview with Christy [Chamber of Commerce, N.W. Arkansas]).

[20]Towns such as Fayette, Mississippi are still in this situation (interview with Evers, Mayor; and Baroni, Economic Development Committee, Fayette).

[21]Industrial development officials in booming areas such as Fayetteville and Harrison, Arkansas; Cookeville, Tennessee; and Johnson City, Tennessee would not even talk with apparel firms. The second stage city of Hattiesburg, Missippi was also not interested, although it would refer the firms to one of the more isolated counties in the district which has experienced less development (interviews with Christy and Dunlap [Chamber of Commerce, N.W. Arkansas]; East, [1st Tennessee-Virginia Economic Development District, Eastern Tennessee]; and Runnels [Industrial Development Board, S.E. Mississippi]).

A potential bottleneck often appears early in the second phase. Because of better-paying plants and frequent tight labor markets, lower-wage plants find it difficult to obtain the same workers they found during earlier stages of development. Consequently, they begin to urge chambers of commerce (CoC) and industrial development commissions to relax their efforts to attract new firms.[22] Since industrial development groups often seek to improve the industry-mix by attracting better-paying plants with more attractive working conditions, the conflict can become bitter, leading even to secession of various industries from chambers of commerce.[23] If the low-wage groups were successful, the industry-mix might stagnate. However, the overwhelming response of industrial development officials interviewed for this study was that they have enough support to continue their effort to attract better firms.

Seventh, conflict between the phases -- or, more accurately, during the second phase -- raises interesting questions for the future. First, will the second phase nonmetro area evolve into a third phase -- a relatively high-wage, unionized stage similar to the industrial North? None of the areas has yet reached this point, but it is the next "logical" step. Second, will the low-wage firms, increasingly restive in the tighter labor markets of the second phase areas, "spin-off" (or, at least, establish their expansion plants) in the remaining labor surplus areas of the South -- the Delta and Deep South heavily black areas? If so, these areas might undergo the same two-phase industrial development during the 1970's that the border South experienced in the 1960's. This would be good news indeed to labor surplus areas, but empirical evidence for this "spin-off" theory is still quite limited. Of our two case-study areas in the Deep South, one, in central Louisiana near Alexandria, reported a marked increase in the number of apparel firms inquiring into and locating in central Louisiana since 1970. However, neither the eastern Kentucky

---

22 Every chamber or industrial development official attested to this pressure, but maintained that it was not stopping efforts for a better industry-mix.

23 This actually occurred in Harrison and Conway, Arkansas.

nor southeast Mississippi areas (centered on Hattiesburg and Laurel, Mississippi) reported this trend.[24]

Hattiesburg exemplifies an eighth point. We have already referred to labor-surplus areas like the Mississippi Delta and the Deep South, which are still largely in the low-wage phase of industrial development. However, even within the booming development district of the Border South, generally only the main population centers have attracted better-wage plants and have a tight labor market. The less populated and isolated counties of the district are still generally in the low-wage stage, if they have any plants at all.[25] Although commuting to the main center provides good jobs for many, others live too far away, the roads are too bad (especially in the winter), or they lack a car to get to the job.[26] Opinions were virtually unanimous that the most serious poverty problems occur in these isolated areas only partially affected by the manufacturing boom. Job development, in other words, has not spread evenly over booming multi-county nonmetro areas in the Border South, but has been concentrated in growth centers -- often the largest town and those located on an interstate highway.[27]

---

24 Interviews with Luke and Wright (Alexandria, Louisiana); Forester (ES, Harlan, Kentucky); and Runnels (Industrial Development Board, S.E. Mississippi).

25 Interviews with East (1st Tennessee-Virginia Economic Development District, Eastern Tennessee); Young (Community Action Agency Director, N.W. Arkansas); Dunlap (Chamber of Commerce, N.W. Arkansas); and Runnels (Industrial Development Board, S.E. Mississippi).

26 Interviews with Young (Community Action Agency Director, Harrison, Arkansas).

27 For example, the Director of the Kentucky State Industrial Development Division stated that quite a few plants had located on the Interstate running south from Lexington, but that it was almost impossible to get them to consider sites further east.

Eighth, attention so far has been focused on manufacturing employment because it is the key dynamic sector in the economic base of nonmetro areas. However, many areas of the South - especially the hill country, Border South - are quite beautiful and contain much potential for tourism and service jobs. In Northwest Arkansas, "Dogpatch, U.S.A." (a Disney-type amusement park near Harrison) and a "Passion Play" (a dramatic re-enactment of the Passion of Jesus) bring in tens of thousands of tourists each year, and create numerous jobs in motels, restaurants, and retail craft and souvenir shops.[28] Most of the jobs are low-wage, but, as I was frequently told, "some job is better than no job." Also, the dammed-up lakes of the Ozarks and the T.V.A. region provide not only tourist attractions (fishing, boating), but also amenities attractive to management of prospective plants.[29]

A final proviso is that locationally labor-oriented manufacturing plants typify the nonmetro South, but are not the whole story. In the plains areas of western Texas and Oklahoma, manufacturing growth was not only less than in the Border South, but it was of a different locational type -- resource-oriented, rather than labor-oriented. Some apparel firms had come for women, but manufacturing jobs for men were in packing plants, firms manufacturing fertilizer (W.B. Grace in Woodward, Oklahoma), or adapting planes for crop-dusting, etc.[30] Thus manufacturing jobs, to a much larger degree, evolved from the prosperous farming, ranching, and oil-producing base. Because of the relatively high-wage jobs for men in oil and ranching and a tight labor supply, a predominately resource-oriented manufacturing develops. However, even in many more eastern Border South areas, resource-oriented manufacturing firms have some importance -- a prominent example being the paper and furniture industries tied to many of the South's vast timber reserves.[31]

Ninth, some of the few case-studies of the impact of manufacturing -- such as Gray's study of the Kaiser aluminum plant in West Virginia[32] -- are of high-wage plants that come to an area because of it resources, even if no plants have

---

[28]Interview with Wilkerson (N.W. Ark. Eco. Dev. District).

[29]Interview with Christy (Chamber of Commerce, N.W. Ark.), and East (1st Tenn.-Va. Eco. Dev. District, Eastern Tenn.).

[30]Interviews with Poorbaugh and Ard, (St. Dept. of Indus. Dev., Okla.); and Middleton (Chamber of Commerce, Woodward, Okla.).

[31]These were important in the Tenn, N.C. and La. case-study areas.

[32]Irwin Gray, "New Industry in a Rural Area," Monthly Labor Review 92 (June 1969), pp. 26-30.

preceded them. These cases exist, but they are not typical of Southern nonmetropolitan industrial development, which is usually locationally labor-oriented. Consequently, generalizations from them can be very misleading.

Another special case emerges when an area starts with high-wage unionized plants. This is true of Eastern Kentucky (coal mining), Central Louisiana (paper mills), and Natchez, Mississippi (paper mill and tire plant). Generally, this seems to have impeded job development. It almost certainly scares off the low-wage plants. In central Louisiana the problem in one area was handled by locating a unionized apparel plant in a town with a paper mill.[33] But Natchez officials complained that low-wage plants were being scared off.[34] If the labor history has been one of work stoppages and violence, the obstacle to further industrialization apparently becomes greater. As has been mentioned, industrial development officials in Kentucky stated that it was almost impossible to get firms to consider Eastern Kentucky, mainly (but not only) because of "labor climate."

Finally, political factors might affect industrial development. Industry will not go where it is not wanted. If the leadership in a town has made its wealth from other sources (coal, farming, etc.) and is satisfied with the status quo, manufacturing firms probably will not come. It must be eager enough so that it will make the necessary sacrifices (preparation of industrial sites or industrial parks with adequate gas, water, and sewage hookups and adequate access to transportation, and employment of a competent chamber official (if the town is large enough). Otherwise, the prospective plant will go elsewhere since the town is competing with many other areas possessing such an infrastructure.[35]

B. The Impact of Industrialization on the Poor

The two phases of industrial development have different degrees of inmigration. In the first phase, gross inmigration is very slight. The wage-level is so low that few are attracted back. Further, high unemployment and underemployment typically are deterrents. In the second phase, inmigration is much heavier, since

---

[33]Interview with Luke (Ind. Dev. Board, Alexandria, La.).

[34]Interview with Hawthorne (Chamber of Commerce, Natchez, Mississippi).

[35]Interview with Wilkerson (N.W. Ark. Eco. Dev. District); and Fields (State Ind. Dev. Agency), Kentucky.

the labor market is often tighter and wages in the newer plants are more attractive. The ERS study (Table 6) lends some empirical support to these generalizations. The first phase area of the Arkansas Delta had considerably less inmigration than the second phase areas of Mississippi and Arkansas. The first phase area of Arizona had heavy inmigration, but this may well be due to the heavy return migration of Indians for cultural reasons.[36]

The common opinion that "if a high-wage plant is attracted, inmigrants, not the local poor, will be hired because the skill-level is beyond the reach of the poor" may not be typical.[37] In none of the four ERS areas did inmigrants hold more than one-third of the jobs. The average of the four areas was only 21.8 percent (Table 6). Thus, these cases support the conclusion that most of the manufacturing jobs go to non-migrants, although low-wage jobs are also involved. A significant exception, however, is when a high-wage firm (generally it is resource-oriented) locates in an area where few or no factories have preceded it. In this instance -- especially if job-training facilities are deficient -- the majority of hires may well be inmigrants. This seems to have been the case with the Gray study of the Kaiser plant which located in rural West Virginia. Unfortunately this exceptional case has been made typical of impact on the local labor force.

Moreover, inmigrants are not mainly management-level personnel from the North and West. Typically, more than half of them are remigrants -- individuals who left the area because of inadequate job opportunities, but are anxious to return (at least,this is true of rural whites) when good jobs open up, even if wage levels are lower.[38] The gains in psychic income seem important here.

Also, the sterotype of regarding inmigrants as predominately well-off executive personnel or high-skilled blue and white-collar workers seems poorly supported. In the ERS study, less than one out of ten (9.6 percent) of returnees earned over $120 a week in 1970, while three out of four (76.8 percent) had less than $100.[38a] Inmigrants seem to be three groups:

---

[36]Interviews with Smith (N.E. Mississippi) and Leslie (Cent. Tennessee) also revealed that outmigration was smaller and return migration heavier than in earlier first phase years.

[37]This commonly-held opinion seems to have been based on a few studies such as Gray's. Of the 4,000 jobs in the Kaiser plant, only 600 went to local people.

[38]Economic Research Service, Migrant Response to Industrialization in Four Rural Areas, 1965-1970 (by Duane A. Olsen and John A. Kuehn), AER Report No. 270 (Washington, D.C.: U.S. Department of Agriculture, September 1974), Table 3, p. 9.

[38a]Ibid.,Table 5, p. 10.

Table 6

Inmigration of Workers, Four Study Areas[a], 1970

Study Area	Total Workers	Inmigrants	
		Number	Percent
Northeast Arizona	1,270	305	24.0
Mississippi Appalachia	2,600	470	18.1
Northwest Arkansas Ozarks	1,980	624	31.5
Arkansas Delta	879	71	8.1
Total, Four Areas	6,729	1,469	21.8

SOURCE: Calculated from United States Department of Agriculture, Economic Research Service, Impact of Job Development on Poverty in Four Developing Areas, 1970 (by John A. Kuehn et al.,). Agricultural Economic Report No. 225. Washington, D.C.: U.S.D.A., June 1972. Page 5, Table 2.

[a]The four nonmetropolitan growth areas chosen by ERS were northeast Arizona (Apache and Navajo counties) northeast Mississippi Appalachia (Alcorn and Tippah counties), the northwest Arkansas Ozarks (Benton and Washington counties), and the Arkansas delta (Cross, Lee, and Saint Francis counties). The method used was a plant questionnaire, distributed during the winter of 1970-71 to 25 percent of the employees of plants which had either arrived since 1964 or significantly expanded since 1965. Since only 27 of the 56 plants agreed to cooperate, and since various problems often made the sampling fraction less than 25 percent, the resulting sample was not strictly representative. Further, only direct impact was measured (that of jobs provided in the new or expanded plant). The number and impact of jobs indirectly created (through input-output linkages) or induced (as through the effects of increased incomes on employment in retail trade) were not measured. Despite the limitations, however, the results were highly interesting and valuable.

0034

1) the high-skilled referred to above, 2) relatively unskilled and poorly educated workers who return because they "couldn't make it" in the big city,[39] and 3) workers whose distaste for big city life was not overcome by higher wages there.[40] Either of the latter two groups could have high percentages of poor. The ERS study found that 14.6 per cent of poor workers were migrants. Of the poor inmigrant workers 49.3 per cent were lifted out of poverty.[41] This supports the idea that help to inmigrant poor is also an important welfare benefit of industrialization.

In order to put the evidence in proper perspective, two additional points should be emphasized. The first is that the evidence on tne impact of industrialization in the areas where it occurs is not conclusive. We are not inferring that economic development has done a great deal for the poor throughout all rural areas. This brings up the second point, namely, that industry tends to bypass certain rural areas almost entirely. The most notable areas bypassed by the growth of manufacturing employment had been those with heavy black populations. Indeed, if we superimposed maps showing areas with rapid growth in manufacturing employment on maps showing heavy black population concentrations, there would be an almost perfect mismatch - industry tends to avoid heavy black population concentration. Moreover, blacks do not receive a proportional share of good jobs even in areas with heavy black population concentration.[42]

According to field interviews, industry tends to avoid black areas for a number of reasons. Although whites tend to emphasize labor market characteristics as a reason for avoidance, blacks give greater weight to the continuation of discrimination. Blacks with characteristics similar to those of whites who get rural jobs are found to migrate out of rural areas in search of employment. How-

---

[39]Hathaway, Dale E. and Brian B. Perkins, "Occupational Mobility and Migration from Agriculture," in Rural Poverty in the U.S. A Report by the President's National Advisory Commission on Rural Poverty (Wash., D.C.: Government Printing Office, 1968), pp. 185-237

[40]"An Abundant Source of Labor," reprint. Available from Industrial Development Div., Ken. State Dept. of Commerce, Frankfurt, Kentucky.

[41]This is derived from Table 7.

[42]James Walker, "Economic Development, Black Employment, and Black Migration in the Nonmetropolitan Deep South" (Ph.D. dissertation, Univ. of Texas, Dec., 1973). Prepared under Office of Economic Opportunity Grant 61202, Action 2.

ever, employers tend to emphasize other factors as reasons for avoiding black areas: 1) the probability of recruiting workers for black areas who meet the companies' hiring standards is less than it is from white areas, 2) blacks tend to join unions more readily than whites, 3) the companies' personnel problems might be exacerbated by employment quota or "goals and timetables" affirmative action plans if they moved to counties with very large black population majorities and 4) blacks have been mainly sharecroppers, with limited amounts of education, training or nonfarm work experience. Indeed, in this view, sharecroppers have learned very little even about farming and the management of personal economic affairs because most of these decisions were made by planters.

Secondly, the two phases of industrial development have different characteristics with respect to the tightness of labor markets. Typically, the low-wage stage is characterized by relative labor surpluses. However, in the second phase, as in many areas of the Border South, the number of incoming plants is sufficiently large to cause labor markets to become tighter. Even with inmigration, low-wage plants have trouble finding enough workers during this second phase. (Of course, while this seems factually true, there is no necessity that it be so. Logically, we could conceive of a low-wage area with a tight labor-market, and a second phase area with considerable slackness; quite a few of the latter actually exist in such large non-SMSA cities of the Deep South, as Alexandria, Louisiana and Hattiesburg, Mississippi.) The degree of labor market tightness obviously has great importance for the poor. In a slack market, the poor suffer because of "creaming." A tight market forces employers to lower hiring standards, thus benefitting the poor. This should also tend to lower discrimination against blacks, since employers are no longer able to hire almost totally from the white labor supply.[43]

A third point relates to the commonly expressed fear that most

---

[43]This typically tighter labor market in the second phase is exemplified by the head of the ES in Cookeville, Tenn., who remarked that unemployment was less "than at any time in my memory in the last fifteen years." (Interview with Mrs. Evelyn Bartlett, Cookeville, Tenn., Oct. 1973). Also, the unemployment rates of the first phase central Louisiana and southeast Mississippi areas were considerably more than the second phase northeast Mississippi, northwest Arkansas, Central Tennessee, and Eastern Tennessee areas.

of the poor and less skilled in the South will not be able to qualify for jobs because of low educational levels. The reasoning behind this is that the national average years of schooling for workers in relevant industries is much higher than that of most rural Southerners, especially the poor. Consequently, they will not be able to qualify for the influx of manufacturing jobs. This fear seems unfounded. The universal response in all areas studied is that a high school diploma is not required for production-line type jobs.[44] Only a few of the highest-wage employers in each area require it.[45] For the rest, the main educational requirement is merely to read and write sufficiently to pass manual dexterity tests administered by the plants or the local Employment Security office (ES).[46] This was true not only in areas where labor was tight, but in Hattiesburg, Mississippi as well, where the opportunity to cream the surplus labor supply might lead to a tough educational requirement.[47] Because so many of the jobs were assembly-line type and because the high school diploma was desirable but not required, officials in several areas mentioned that GED adult education programs had met with indifferent response.[48] Some, in areas where the vocational training schools were numerous, mentioned that a graduate of one of these programs had better job chances than someone with a liberal arts high school diploma.[49] If accurate, this is another example of the increasing importance of career-oriented education.

A fourth point is that in all areas there was general agreement that employers were very reluctant to hire workers with a

---

[44]Interviews with Forester (Emp. Security Bureau, E. Ken.); Bull (Emp. Security Bureau, N.W. Ark.); East and Bartlett and Ingram, (Cent. Tenn.); Cotton and Smith (N.E. Miss.); Hale and Runnels (Miss.).

[45]Interviews with East (1st Tenn.-Va. Eco. Dev. District); Carr (upper Cumberland Eco. Dev. District, Cent. Tenn.); and Runnels (Ind. Dev. Comm., S.E. Miss.). Christy (Chamber of Commerce, Fayetteville, Ark.) claimed it was generally necessary, but Bull (Emp. Security Bureau, Fayetteville, Ark.) said most employers considered it desirable, but not necessary.

[46]Interview with Hale (Emp. Security Bureau, Hattiesburg, Miss.).

[47]Ibidem.

[48]Interview with Young (Com. Action Agency, N.W. Ark.) and Hale (Emp. Security Bureau, S.E. Miss.).

[49]Interview with East (1st Tenn.-Va. Eco. Dev. District, E. Tenn.).

record of high turnover in previous jobs.[50] These are the workers with the most serious employment problems, who face difficulty being hired even in areas of booming labor demand. Manpower training centers can help this group. Completion of the program is an indication of stability which the worker's previous employment record lacked.[51] Indeed, one ES Director claimed that employers valued the training at the local MDTA center more for this than for the technical skills imparted.[52]

A fifth point is that the two phases of industrialization seem to differ in poverty impact. In the low-wage phase, two contrary trends occur. First, one expects that a greater percentage of workers hired are poor, both because the skill and educational requirements of the jobs are lower and because the poor are a higher percentage of the labor force. However, there is a greater contrary tendency to "cream" since the labor market is usually more slack than in the second stage. Either of these tendencies could dominate, but the slim evidence we have seems to indicate that hiring the poor prevails over creaming. Thus, in the ERS study, a greater percentage of workers hired were poor in the first phase areas of N.E. Arizona and the Arkansas Delta than in the second phase areas of N.E. Mississippi and N.W. Arkansas (Table 7). However, the first phase may raise a smaller percentage of the poor hired above the poverty line, since wage-levels are low, and since the labor market is typically slack and thus offers less opportunity for the second-earner and part-time earner effects.[53]

The conventional wisdom that "low-wage factories offer few welfare benefits to the poor because of low-wage levels" needs to be modified. In all areas officials agreed that the easiest way for a rural poor family (whether farming or not) to rise above the poverty line is not through full-time farming (they lack access to sufficient credit) or through a high-wage job (these are either non-existent or unobtainable by them), but through the part-time

---

[50]Interviews with Bartlett (Emp. Sec. Bureau, Cent. Tenn.); Bull (Emp. Sec. Bureau, N.W. Ark.); Smith (Emp. Sec. Bureau, N.W. Ark.); and Hale (Emp. Sec. Bureau, S.E. Miss.).

[51]Interviews with Smith (Emp. Sec. Bureau, N.E. Miss.) and Hale (Emp. Sec. Bureau, S.E. Miss.).

[52]Interviews with Smith (Emp. Sec. Bureau, N.E. Miss.)

[53]Empirical evidence does not clearly support this (confer Table 8).

BEST COPY AVAILABLE

Table 7

Impact of Job Development on Poverty Status,
Four Study Areas, 1965-1970

Region and Poverty Status	Number of Jobs[1]	Percent of Determined Jobs[2, 3]
Arizona		
Total number of jobs	1,270	--
Number of jobs determined[2, 3]	373	100.0
Total previously poor	183	49.1
Residents previously poor	121	32.4
Total escaping poverty	93	24.9
Residents escaping poverty	58	15.5
Total slipping into poverty	8	2.2
Residents slipping into poverty	5	1.4
Mississippi Appalachia		
Total number of jobs	2,600	--
Number of determined jobs[2, 3]	2,368	100.0
Total previously poor	441	18.6
Residents previously poor	401	16.9
Total escaping poverty	315	13.3
Residents escaping poverty	281	11.8
Total slipping into poverty	69	2.9
Residents slipping into poverty	56	2.3
Northwest Arkansas Ozark		
Total number of jobs	1,980	--
Number of determined jobs[2, 3]	1,572	100.0
Total previously poor	310	19.8
Residents previously poor	228	14.5
Total escaping poverty	219	13.9
Residents escaping poverty	142	9.1
Total slipping into poverty	73	4.6
Residents slipping into poverty	44	2.8
Arkansas Delta		
Total number of jobs	879	--
Number of determined jobs[2, 3]	809	100.0
Total previously poor	389	48.1
Residents previously poor	370	45.8
Total escaping poverty	230	27.2
Residents escaping poverty	201	24.8
Total slipping into poverty	9	1.1
Residents slipping into poverty	9	1.1
Four study areas combined		
Total number of poor	6,729	--
Number of determined jobs	5,122	100.0
Total previously poor	1,323	25.8
Residents previously poor	1,120	21.9
Total escaping poverty	847	16.5
Residents escaping poverty	682	13.3
Total slipping into poverty	159	3.1
Residents slipping into poverty	114	2.2

[1] Represents total jobs enumerated for which a poverty status was associated.

[2] Jobs enumerated for which a poverty status in both time periods was determined.

[3] Usage of these percentages assumed that sampled responses were typical of unsampled employees and sampled refusals by plant. Percentages are based on unrounded data.

SOURCE: U.S. Department of Agriculture, Economic Research Service, Impact of Job Development on Poverty in Four Developing Areas, 1970 (by John A. Kuehn et al.). Agricultural Economic Report No. 225, Washington, D.C.: U.S. Department of Agriculture, June, 1972, p. 7, Table 3.

earner or the second-earner effect.[54] Indeed, many mentioned that farmers with a subsistence plot will take a full-time job in a local factory and then farm in the evenings and on week-ends. So we should talk about a "full-time (second-job) effect" as well as the "part-time" and "second-earner" categories. (The opposite of this might be the "go-getter" in the Tennessee Cumberlands area. Among the mountain people, a "go-getter" is defined as the husband who "goes and gets her" [his wife] after she has worked all day in the "cut n' sew" plant. However, if he farms his plot, even this could be an example of the "second-earner" effect!) The essential point is that the wage-level of an individual job is not conclusive. Poverty impact is significant if though the "second-earner," "part-time earner," and "full-time earner" effects, the combined family income rises above the poverty line. Hence, the poverty impact of even the low-wage phase of industrialization can be considerable.

To some extent, the rationale for the role of marginal industry as a way to improve the conditions of the rural poor depends on unique rural conditions and the characteristics of the people involved. We assume that some people will work in marginal jobs wherever they are. This is particularly true of older people with limited levels of education and nonfarm work experience. Because many low income rural families use these marginal jobs to supplement family income from farming and other sources, incomes that appear low by urban standards might have considerable impact on rural family living conditions partly because of the lower cost of rural living but also because of differences in life styles. A given amount of income frequently can have a greater impact on rural than urban families.

During the second phase of industrial development, contrary patterns of poverty impact are also at play. On the one hand, in this phase the percentage of jobs going to the poor would be less than in phase one, since the better-wage plants have higher skill and educational demands, since more inmigrants are hired, and since the percentage of poverty in the local population has declined. On the other hand, low-wage plants will often be forced to lower their hiring standards and stop creaming.[55] Thus the percentage of poor

---

[54]Interviews with Woody & Price (E. Tenn.); Bartlett (Cent. Tenn.); Young (N.W. Ark.); Boykin & Dandy (Cent. La.); Ingram (Cent. Tenn.); and Woodward (S.E. Miss.). No one disagreed with this.

[55]Interview with Hale (Emp. Sec. Bureau, S.E. Miss.) and Young (Com. Action Agency, N.W. Ark.).

persons in their work forces should rise. Either tendency could be dominant, but the limited empirical studies indicate that a lesser percentage of the hires are poor. Thus the percentage was lower for the Arkansas Ozarks and N.E. Mississippi areas in the ERS study (Table 7). The second question refers to what percentage of workers hired will be raised from poverty. Theoretically, in this phase a higher percentage of poor workers should be lifted out of poverty, since wage-levels are higher and since, generally speaking, the labor market is tighter. The limited empirical data, however, are inconclusive on this question. In the ERS study the net percentage raised out of poverty was higher in N.E. Mississippi, but not in the Arkansas Ozarks, than in the two first phase areas (Table 8).

A sixth point relates to manpower programs, which obviously play a vital part in any anti-poverty strategy. First, manpower programs, including "start-up," were in operation in all of the areas studied.[56] The problem is that the junior colleges or area vocational schools are centered in the largest towns. People in the more isolated counties do not have practical access to these institutions.[57] In eastern Kentucky and eastern Tennessee, however, area vocational schools exist, or are being built, in almost every county of the development district. A second point is that generally OJT and "start-up" type training were regarded as the most effective, since they were tied to existing jobs.[58] However, a few vigorously dissented, claiming that OJT and start-up "creamed," and that only institutional training reached those with the most serious employment problems.[59] The chief criticism of institutional training was that it trained too many in certain occupations.[60] A third point was that in at least one area employees

---

[56]Interview with Forester (Emp. Sec. Bureau, E. Ken.); Luke & Wright, Ind. Dev., Cent. La.); and Christy (Chamber of Commerce, N.W. Ark.).

[57]Interview with Bartlett (Emp. Sec. Bureau, Cent. Tenn.); Forester (Emp. Sec. Bureau, E. Ken.); Hale (Emp. Sec. Bureau, S. E. Miss.); Young (Com. Action Agency, Ark.); and Woodward (Com. Action Agency, S.E. Miss.).

[58]Interview with Cotton (Chamber of Commerce, N.E. Miss.); Bartlett (Emp. Sec. Bureau, Cent. Tenn.); and Christy (Chamber of Commerce, N.W. Ark.).

[59]Interview with Newcomb, S.E. Miss, Eco. Dev. District, and Terhune (State Manpower Administration, Ken.).

[60]Interview with Boykins and Dandy (Cent. La.).

Table 8

Previously Poor Resident Households Out of Poverty[1] in 1970, Four Study Areas

Study Area	Number of Previously Poor Resident Worker Households	Escaping Poverty			
		Number		Percent	
		Gross	Net[2]	Gross	Net
Northeast Arizona	121	58	53	47.9	43.8
Mississippi Appalachia	401	281	225	70.1	56.1
Northwest Arkansas Ozarks	228	142	98	62.3	43.0
Arkansas Delta	370	201	192	54.3	51.9
Total, Four Areas	1,120	682	568	60.9	50.7

[1]Poverty thresholds were defined as $2,000 for the first member and $600 for each additional member. Incomes were inflated to a 1970 base year by the CPI to remove the effect of price changes. Household income in 1970 was compared to household income in the most recent previous job held to determine changes in poverty status.

[2]The net number equals the number of previously poor residents who escaped poverty (i.e., the gross amount) minus the previously nonpoor who slipped into poverty.

SOURCE: Calculated from USDA, ERS, loc. cit.

0042

were not interested in one manpower program available only to the disadvantaged but favored programs available to the advantaged as well as the disadvantaged.[61] Fourth, there was considerable confusion about what would emerge in the Comprehensive Employment and Training Act of 1973 (CETA), with most feeling that at least at the start the programs would be much as before.[62] In the local area, the agency in charge varied, being ES in Mississippi and the development districts in Tennessee. Fifth, the Corinth and Hattiesburg ES agencies were tied into a computerized Job Bank system for all of Mississippi, and found it most helpful for advising area youth of employment openings elsewhere.[63] Sixth, in almost all areas Community Action Agencies (CAA) had been running the Operation Mainstream and Neighborhood Youth Corps programs. Under CETA they will lose these programs.[64] There was considerable dispute as to why. Some claimed that under CAP, training was poor and administrative costs were too high, sometimes reaching 80 percent. The CAA's vigorously disputed this, claiming that administrative costs were kept low, that the 20 per cent ceiling requirement made it impossible to serve the poor with the most problems, and that the basic reason for the switch was simply politics -- the local county judges and other political officials wanted the programs under their control, and therefore favored the development districts[65] on which they sat as the board of directors. Seventh, there was general agreement among the CAA's and manpower planners that a good many of the poor need transition training - how to fill out a form, act during job interviews, as well as gain the habit of showing up on time, arranging day care, etc.[66] One

---

[61] Interview with Carr (Upper Cumberland Eco. Dev. District, Cent. Tenn.).

[62] Interview with Terhune (State Manpower) and Alford (Emp. Sec. Bureau, Cent. La.).

[63] Interview with Hale (Emp. Sec. Bureau, S.E. Miss.) and Smith (Emp. Sec. Bureau, N.E. Miss.).

[64] Interviews with Ingrams (Com. Action Agency, Cent. Tenn.); Price (Com. Action Agency, E. Tenn.); Banks (Com. Action Agency, E. Ken.); and Woodward (Com. Action Agency, S.E. Miss.).

[65] References can not be given, since these remarks were off-the-record.

[66] Interviews with Woody (Emp. Sec. Bureau, E. Tenn.); Price (Com. Action Agency, Cent. La.); Ingrams (Com. Action Agency, Cent. Tenn.); and Alford (Emp. Sec. Bureau, Cent. La.).

ES official claimed that WIN training had served this purpose for welfare women in Eastern Tennessee.[67] Finally, the problem of training in a stagnant area was evident in Eastern Kentucky. One ES official put it this way: "We end up training people for Chicago and Detroit."[68]

Moving on from the topic of manpower programs, considerable controversy exists over discrimination against blacks. White officials claimed - even in the Deep South - that good factory jobs were open to blacks as well as whites, and that blacks could and were being promoted to oversee whites. Black officials agreed that progress had been made and that less discrimination existed in manufacturing than in other industries. But they also claimed that much discrimination remained, that companies were reluctant to have whites work under a black, and that there was wide evasion of EEOC regulations. For example, they stated that a black might be hired (because of the EEOC), given a secretary, an office, and an impressive title, but actually have no authority or duties.[69]

A final point relates to the OEO economic development activities. In northwest Arkansas loans for a feeder-pig operation and a craft cooperative for the mountain women seemed economically succesful for isolated rural families who did not, or could not, commute to work.[70] Also in the same isolated counties OEO staff acted as a substitute ES where the ES arrived only for a few hours each week to handle unemployment insurance. Here the CAA had resisted pressure from higher levels of OEO to buy factories (e.g., canneries) as economic development activities. It resisted on the grounds that job demand was adequate and booming.[71] In this area OEO seemed to fit skillfully and functionally into the economic development activities of the area. In other areas this was not as evident, often because of political opposition or because the CAA seemed to lack business and economic expertise.

Finally, the most serious poverty problems lay in regions where manufacturing simply would not go. The Eastern Kentucky coal fields were an example. Kentucky state industrial development officials stated that manufacturers generally did not even want to

---

[67]Interviews with Woody (Emp. Sec. Bureau, E. Tenn.).

[68]Interviews with Forester (Emp. Sec. Bureau, E. Kan.).

[69]These remarks on the whole subject of discrimination were given off-the-record.

[70]Interview with Young (Com. Action Agency, N.W. Ark.).

[71]Ibidem.

consider sites in eastern Kentucky as a location.[72] The reasons are legion: poor roads, few level sites, backward public services and ugly, coal-dingy towns, and above all the "labor climate": the high-wage and violent conflicts between the United Mine Workers and the coal operators. The only hopeful development is the boom in mining jobs as a result of the energy crisis.[73] But the number of mining jobs is insufficient, and many do not wish to work there (despite high wages) because of the dangers to health and safety.[74]

III. TRENDS IN THE INCOME OF FARMERS[75]

A. How much of the farmers' income comes from nonfarm sources? What are the trends in the pattern of income sources for farmers?

While historically farm families relied almost exclusively on income from farming operations, including home-consumed products, in recent years nonfarm sources of income have become very important for most families with some farm income. Currently, approximately half of the total income from all farm families comes from nonfarm sources. This change has occurred for several reasons. The technological changes in agricultural production have greatly reduced labor requirements for farm operations and have resulted in surplus hours for operators in farming. This has stimulated farm operators to seek nonfarm employment. Moreover, income from farming, especially for the many small operators, has not been sufficient and thus many of these smaller farmers have sought nonfarm employment to bolster sagging family incomes. In addition, the growing number of nonfarm employment opportunities resulting from increased industrialization in or near to many traditionally agricultural areas has provided farmers with means for increasing and stabilizing their incomes. Each of the above-named reasons

---

[72] Interview with Fields (Ken. State Dept. of Commerce).

[73] Ibidem.

[74] Interview with Dixon (Emp. Sec. Bureau, E. Ken.).

[75] Text and data for this section were generously provided by Professor Allan Thompson, Assistant Professor of Economics, Whittemore School of Business and Economics, University of New Hampshire at Durham. Professor Thompson's work is part of the Small Farmers Project being done at the Center for the Study of Human Resources, the University of Texas at Austin, under contract with the Southern Regional Council.

(mechanization, low income, and rural industrialization) have stimulated growth in nonfarm employment for wives of operators and other members of farm families. Finally, the composition and characteristics of families with farm income has changed. Traditionally, except for farm laborers, families with farm income were largely farm families, i.e., families who resided on and operated a farm as the primary or exclusive income-generating operation. However, today many persons are working off the farm and many others see farms as excellent investment opportunities where one can speculate on land values while at the same time enjoy tax advantages from operating farms. These "hobby farms" have grown rapidly in number in the past several years. For these "farmers" nonfarm income is the primary source and because their nonfarm incomes are likely to be substantial, the growth in "hobby farms" has contributed to the decline in percentage of income received by farm families from farm sources.

The current status and trends in the importance of farm income can be seen from the data in Tables 9-12. Table 9 shows the family income from farm and nonfarm sources for families with farm operations. Farm income includes not only net cash sales but also government payments and home-consumed commodities. Table 10 shows the percentage of family income from farming for selected years by value of sales class. This table is derived from the data in Table 9. Table 11 shows the income by source in constant dollars. The data here is also derived from Table 9 using the consumer price index for all items (1967=100) as the deflator. Tables 9-11 are each derived from the figures in the Farm Income Situations for July, 1973, and are for the entire United States. Table 12 shows the distribution of farm operators in the South by days of off-farm work and economic class of farm. To make the figures comparable with the above Tables 9-11, all three categories of farms with sales under $2,500 have been included under class six farms.

The percentages of family income vary greatly by farm size in terms of income. In 1972, more than three-fourths of the income for larger farm operations ($20,000 and more of farm sales) was derived from farming. For the smaller farms ($10,000 and below) some three-fourths of the family's income was from non-farm sources. The percentage of income accounted for by farm operations in 1972 ranged from better than 80 percent for the largest size farms to only 10 percent for the smallest farms. As Table 9 indicates, the picture of nonfarm and total family incomes by size of farm operations is somewhat complicated. Nonfarm income is absolutely highest for farms with lowest sales. Moreover, the average family income for the smallest size farm compares favorably with the income of families between $10,000 and $20,000 worth of farm sales. It should be remembered, as will be described later, that within each of these categories there is a wide diversity of patterns of income and importance of farm operations.

Table 9

Income For Farm Operator Family by Major Source
And by Value of Sales Classes, 1960-72

Year	Farms With Sales						All Farms
	$40,000 and over	$20,000 to $29,999	$10,000 to $19,999	$5,000 to $9,999	$2,500 to $4,999	Less than $2,500	
	Dollars						
	Realized Net Farm Income[1]						
1960	19,035	8,630	5,356	3,299	1,958	854	2,962
1961	21,325	9,273	5,723	3,498	2,057	910	3,306
1962	21,245	9,166	5,701	3,424	1,991	909	3,418
1963	21,717	9,064	5,638	3,320	1,908	898	3,522
1964	23,022	9,556	5,997	3,486	1,985	951	3,786
1965	25,422	10,068	6,268	3,547	1,974	988	4,169
1966	30,602	11,585	6,818	3,671	2,064	1,027	5,015
1967	25,806	10,437	6,194	3,352	1,880	974	4,498
1968	26,400	10,869	6,367	3,415	1,893	997	4,783
1969	30,022	12,012	6,793	3,555	1,929	1,036	5,598
1970	29,246	11,712	6,621	3,463	1,876	1,015	5,685
1971	25,208	10,534	5,940	3,090	1,675	943	5,233
1972	31,310	11,927	6,736	3,533	1,929	1,061	6,856

0047

Table 9 (Continued)

Year	$40,000 and over	$20,000 to $29,999	$10,000 to $19,999	$5,000 to $9,999	$2,500 to $4,999	Less than $2,500	All Farms
	Farms With Sales						
	Dollars						
	Off-Farm Income						
1960	2,177	1,678	1,258	1,573	1,849	2,730	2,139
1961	2,585	1,816	1,441	1,864	2,130	3,047	2,416
1962	3,022	1,957	1,631	2,163	2,417	3,372	2,699
1963	3,503	2,131	1,853	2,506	2,754	3,783	3,041
1964	3,959	2,306	2,056	2,815	3,055	4,119	3,338
1965	4,453	2,496	2,296	3,200	3,425	4,614	3,733
1966	4,489	2,601	2,463	3,498	3,769	5,226	4,109
1967	4,584	2,695	2,588	3,709	4,016	5,596	4,361
1968	5,133	2,987	2,849	4,054	4,395	6,191	4,800
1969	5,436	3,213	3,089	4,395	4,790	6,936	5,256
1970	6,153	3,603	3,448	4,884	5,340	7,815	5,876
1971	6,532	3,812	3,624	5,129	5,616	8,310	6,196
1972	6,673	4,000	3,895	5,568	6,140	9,496	6,759

0046

Table 9 (Continued)

Year	Farms With Sales: $40,000 and over	$20,000 to $39,999	$10,000 to $19,999	$5,000 to $9,999	$2,500 to $4,999	Less than $2,500	All Farms
	Dollars						
	Total Income Including Non-money Income From Farm Food and Housing[1]						
1960	21,212	10,308	6,614	4,872	3,807	3,584	5,101
1961	23,910	11,089	7,164	5,362	4,187	3,957	5,722
1962	24,267	11,123	7,332	5,587	4,408	4,281	6,117
1963	25,220	11,195	7,491	5,826	4,662	4,681	6,563
1964	26,981	11,862	8,053	6,301	5,040	5,070	7,124
1965	29,875	12,564	8,564	6,747	5,399	5,602	7,902
1966	35,091	14,186	9,281	7,169	5,833	6,253	9,124
1967	30,390	13,132	8,782	7,061	5,896	6,570	8,859
1968	31,533	13,856	9,216	7,469	6,288	7,188	9,583
1969	35,458	15,225	9,882	7,950	6,719	7,972	10,854
1970	35,399	15,315	10,069	8,347	7,216	8,830	11,561
1971	31,740	14,346	9,564	8,219	7,291	9,253	11,429
1972	37,983	15,927	10,631	9,101	8,069	10,557	13,615

[1]Includes government payments.

SOURCE: U.S. Department of Agriculture, Economic Research Service, Farm Income Situation, Washington, D.C.: U.S. Government Printing Office, July, 1973.

0049

Table 10

Percentage of Income from Farming Operations
by Value of Sales Class for Selected Years 1960-1972

Year	I	II	III	IV	V	VI	All Farms
1960	89.7	83.7	81.0	67.7	51.4	23.8	58.1
1965	85.1	80.1	73.2	52.6	36.6	17.6	52.8
1970	82.6	76.5	65.8	41.5	26.0	11.5	49.2
1972	82.4	74.9	63.4	38.8	23.9	10.0	50.4

SOURCE: Derived from U.S. Department of Agriculture, Economic Research Service, Farm Income Situation, Washington, D.C.: U.S. Government Printing Office, July, 1973,

0050

Table 11

Income of Farm Families By Source for Selected Years 1960-1972
in Constant Dollars (1967=100)

Year		I	II	III	IV	V	VI	All Farms
	Farm	21,460	9,729	6,038	3,719	2,207	963	3,339
1960	Nonfarm	2,454	1,892	1,418	1,773	2,085	3,078	2,412
	Total	23,914	11,621	7,456	5,493	4,292	4,041	5,751
	Farm	26,902	10,654	6,633	3,754	2,089	1,045	4,412
1965	Nonfarm	4,712	2,641	2,430	3,386	3,624	4,883	3,950
	Total	31,614	13,295	9,063	7,140	5,713	5,923	8,362
	Farm	25,147	10,071	5,693	2,978	1,613	873	4,888
1970	Nonfarm	5,291	3,098	2,965	4,199	4,592	6,720	5,053
	Total	30,438	13,169	8,658	7,177	6,205	7,593	9,941
	Farm	24,988	9,519	5,376	2,820	1,540	847	5,472
1972	Nonfarm	5,326	3,192	3,109	4,444	4,900	7,579	5,394
	Total	30,314	12,711	8,485	7,264	6,440	8,426	10,866

SOURCE: U. S. Department of Agriculture, Economic Research Service, Farm Income Situation, Washington, D.C.: U. S. Government Printing Office, July, 1973.

0051

Table 12

Distribution of Southern Farms by Days of Off-Farm Work
And Economic Class of Farm, 1959-1969

Economic Class	Year	Days Off Farm Work				
		None	1-99	100-199	200+	Total
1	1959	78.7	8.0	2.6	10.7	100.0
	1969	70.8	12.3	4.0	12.8	100.0
2	1959	72.4	12.4	3.6	11.5	100.0
	1969	63.5	15.9	5.0	15.7	100.0
3	1959	67.2	15.7	4.7	12.4	100.0
	1969	57.6	17.4	6.5	18.5	100.0
4	1959	63.5	18.0	5.2	13.3	100.0
	1969	50.9	14.6	7.8	26.7	100.0
5	1959	59.5	17.6	6.3	16.6	100.0
	1969	45.5	11.8	8.1	34.7	100.0
6*	1959	45.0	13.4	7.7	33.9	100.0
	1969	29.5	12.3	11.1	47.1	100.0
Total	1959	52.7	14.7	6.7	25.9	100.0
	1969	41.9	13.2	9.0	35.9	100.0

*Class 6 includes part-time and part-retirement farms.

SOURCE: 1959 and 1969 Census of Agriculture, Statis. Reports.

0052

It is clear from the attached tables that income from non-farm sources is becoming an increasingly important part of the family income for families with farm operations. Overall, the percentage of income from farming declined from 58 per cent in 1960 to about one-half in 1972. Moreover, declines were noted in each of the size categories. However, the decreased importance of farming was particularly striking for the smaller sizes of farms. In 1960, farm income accounted for better than half the income of families with farms having at least $2,500 of sales. By 1972, however, farm income was more important than nonfarm income only for farms having at least $10,000 in farm sales. The importance of farming for all farms failed to show the dramatic shifts within the various sales categories because of the shift in the distribution of farms. The two largest size categories accounted for less than 10 per cent of all farms in 1960 but nearly one-fourth in 1972.

Table 11 shows the trends in income by source in constant dollars and reveals nonfarm incomes to have continually increased in every period from 1960 to 1972, while average farm incomes have been dropping since 1965. Since the larger farms are more heavily dependent on farm income, there has been a slight decrease in real income for families with larger farms, while incomes have increased for families with farm sales under $10,000.

Data in Table 12 show the days spent by Southern farmers in work off their own farms by economic class of farm for 1959 and 1969 and reveal the importance of farming for the various size of farm operations. The diversity in the importance of farming is apparent, not only among the size categories, but within each category. Overall, in 1969, farming was the exclusive activity of 42 percent of the farmers, while 36 percent spent 200 days or more in off-farm employment. The percent of farmers with no off-farm work ranged in 1969 from 71 percent of those with $40,000 or more of sales to less than 30 percent of those with less than $2,500 of sales. While just under 50 percent of farmers in the smallest category worked 200 days or more off the farm, the same was true for only 13 percent of farmer operators in the largest category.

The trend to more non-farm employment is clearly revealed in the data. Between 1959 and 1969 the percentage of farmers with no off-farm work dropped for each category of farm. The trend was very pronounced for those with less than $10,000 of sales. For farmers with between $2,500 and $10,000 of sales, more than twice as large a percent spent 200 days or more in off farm work in 1969 as in 1959. For farmers with less than $2,500, there were less than 30 percent who spent no time off the farm in 1969 compared to 45 percent in 1959.

However, despite the dramatic shifts to off-farm employment, the importance of farm income to many of the smaller farms is clear. Nearly one-half of class four and class five farmers had no other form of employment and an additional 12-15 percent worked less than 100 days. Moreover, nearly one-third of all farmers with sales under $2,500 spend less than 100 days off the farm. For this group of small farmers, many of whom are apparently poor or nearly poor, the loss of farm income or a substantial decrease would be disastrous. On the other hand, increases in farm earnings of a few hundred or a few thousand dollars could be an extremely important way to improve total family incomes.

B. How much do secondary workers in farm families participate in non-farm labor markets?

As Table 13 shows, wives in rural-farm families with some farm self-employment income have lower labor force participation rates than all married women. In part, this reflects the characteristics of rural labor markets in general but particularly reflects the higher average age of this segment of the population. Labor force participation for wives in farm families compares favorably with those for similar women whose husbands are without farm self-employment income. The percentage of employed women in rural-farm, husband-wife families with non-farm occupation is 85.7 percent in the total U.S. and 91.2 percent in the South, compared to 98.2 percent for all married women. One-fourth of all women in these families in the total U.S. in 1970 participated in non-farm jobs, much lower than all women, but again relating primarily to the age of the population.

C. When members of farm families take jobs in the non-farm sector, in which occupations and industries do they work?

The attached tables show the occupational distributions of males in the rural-farm sector with farm self-employment income and for wives in rural-farm, husband-wife households. The data are from the special report, Income of the Farm Related Population from the 1970 Census of Population. Both Tables 14 and 15 show the total occupational distribution as well as the distribution of those employed in strictly non-farm jobs. The conclusion from the adjusted data is that the principle difference in occupational distributions relates to the much larger proportion of rural-farm males with farm self-employment income in farm-related occupations. Once farm-related occupations are excluded, males with farm self-employed income and all males are distributed among non-farm jobs in much the same fashion. For wives in rural-farm, husband-wife families, the principle differences in non-farm employment are 1) the lower

Table 13

Labor Force Participation of Married Women, 1970

Group	Overall LF PR	Percent Employed[2] in Nonfarm LF	Percent of the Employed[1] in Nonfarm Occupations
Total US, wives in rural-farm, husband-wife families with some farm self-employment income.	29.0	85.7	24.9
South (same as above)	31.5	91.2	28.8
Total US, All married women, husband present	40.8	98.2	40.1

Notes: [1] Percentage of employed women with non-farm jobs

[2] Adjusted participation rate after reducing total labor force (both employed and unemployed) by percentage employed in farm related jobs. (That is, total labor force = column 2* total labor force).

SOURCES: Data on wives in rural-farm, husband-wife families from Income of the Farm Related Population, 1970 Census of Population, Special Report PC (2)-8C.

Data for all married women from the Manpower Report of the President, 1974 (CPS data for March, 1970).

0053

Table 14

Occupational Distribution of Males with Farm-Related Income, 1970

Occupation	Total US Rural Farm Males with Farm-Self Employment Income		Total US All Males		Total South Rural Farm Males with Farm-Self Employment Income	
		ADJ[1]		ADJ		ADJ
Professional & Technical	5.5	12.9	14.0	14.8	6.2	12.5
Manager	6.5	15.3	14.2	15.0	8.4	17.0
Sales	2.9	6.8	5.6	5.9	3.2	6.5
Clerical	2.7	6.4	7.1	7.5	3.4	6.9
Craftsmen	10.2	24.0	20.1	21.2	11.8	23.9
Operatives	9.5	22.4	19.6	20.7	10.4	21.1
Laborers	2.4	5.6	7.3	7.7	2.9	5.9
Farmers & Farm Managers	55.7	--	3.4	--	48.1	--
Farm Laborers & Foremen	1.9	--	1.9	--	2.5	--
Service	2.8	6.6	6.7	7.1	3.1	6.3

[1]
Note: Adjusted distribution show occupations distribution of nonfarm jobs.

SOURCES: Income of the Farm Related Population, 1970 Census of Population, Special Report, PC (2)-8C.

Manpower Report of the President, 1974

0050

Table 15

Occupational Distribution of Married Women in the US, 1970

Occupation	Total US Wives of Rural-Farm Husband-Wife families w. Farm Self Employment Income		South (same as)		Total US, All Married Women, Husband Present	
		ADJ[1]		ADJ		ADJ
Professional, Technical & Managers	21.2	24.7	20.8	22.8	20.1	20.5
Sales	5.9	6.9	5.7	6.3	7.1	7.2
Clerical	22.2	25.9	21.1	23.2	33.6	34.2
Operative	15.9	18.6	25.2	27.7	16.3	16.6
Other Blue Collar	4.0	4.7	3.9	4.3	1.6	1.6
Farmers and Farm Managers	6.1	--	4.2	--	0.2	--
Farm Laborers and Foremen	8.2	--	4.6	--	1.6	--
Service, Other than PHW	14.3	16.7	11.8	12.9	16.0	16.3
PHW	2.2	2.6	2.6	2.8	3.5	3.6

[1]
Note: Adjusted distribution show jobs other than farm-related.

SOURCES: Income of the Farm Related Populations, 1970 Census of Population, Special Report PC (2)-8C.

Manpower Report of the President, 1974 (CPS Data, March, 1970).

0057

proportion employed as clerical workers -- a difference probably reflective of rural industry mix -- and 2) a somewhat greater proportion in professional and blue-collar jobs.

In summary, the crucial and growing importance of non-farm income for farm families is evident, especially in the small-size operations where most of the farm poor are present. The higher percentage of men in craftsmen and operative jobs -- and the remarkably higher percentage of women in operative and other blue-collar jobs -- reveals again the crucial importance of manufacturing employment for rural farm families. Farm income, however, is still quite important, and the current increased demand for farm products should be a significant help. The chief problem areas are eastern Kentucky, western Texas and Oklahoma, south Texas, and many parts of the Delta and Deep South areas -- all of which experienced disappointing employment gains in the 1960's.

IV. REFLECTIONS ON POLICY

Basically, if the nonmetro South is now primarily in the industrial stage of development, and if poverty impact is considerable, it makes sense to support local governments and business groups in their efforts to attract industry. However, their frequent lack of concern with the poor means that it will be necessary to insist that labor and the poor share fully in the benefits of industrial development. This may be done in practice by:

(1) Backing local interests in their efforts to obtain necessary water, sewage, and industrial park facilities. This industrial infrastructure seems necessary to be competitive with other communities in attracting industry;

(2) Insisting on adequate and competent job-training and basic education programs for the locally unskilled and under-educated, including "start-up" programs to train local residents in skills needed by incoming plants. (Evaluation data for manpower programs are especially needed, since they are currently almost totally absent on the local level);

(3) Insisting on the enforcement of anti-discrimination laws, so that blacks can share in industrial development and are not forced to migrate to Northern ghettoes, as they have been in the past;

(4) Supporting efforts to attract higher-paying plants, when local low-wage industries, during tight labor markets, resist this as a threat to their labor supply.

On the other hand, if the stages model presented is accurate, certain other policies seem less practical:

(1) Assuming that development is a function of high-wage industry and then advising backward nonmetro areas with little factory experience to go after such firms seems a dubious policy. There is no evidence that plants will come to such areas, except in the rare cases of resource-oriented firms. Even medium-wage enterprises generally have only located in areas of previous industrial development. (However, it should be noted that some local officials felt that adequate manpower training facilities would enable an area to leapfrog the low-wage stage.)

(2) Unionization seems extremely difficult during the first stage of industrial development. The low-wage firms, often in very competitive industries, will resist unionization vigorously, and, given the labor surplus and the unskilled nature of the jobs, organizing will have the greatest handicaps. Also, industrial developers interviewed often mentioned that being a union town will scare first stage firms away and stunt the development process. Unionization should be more possible in the second stage.

(3) Although the main hope for improving the incomes of rural people must lie in economic development in the private profit making sector, self-help activities also have a role to play. Community development corporations and cooperatives have been and are valuable activities, especially for providing an organized base for the poor and some participation in the economic decisions that affect their lives. But the amount of jobs and income they can realistically be expected to provide seems dwarfed in comparison to successful participation of workers and poor in the industrialization currently underway.

Finally, in most places OEO community action agencies are losing many of their programs, especially in the manpower field. Yet compared with other agencies besides welfare, usually only the CAA's have close contact with the poor. It seems logical that they would therefore perform an outreach function, under proper quality standards, for development activities aimed at the poor. It will be unfortunate if, because of past political conflicts, efforts at the local level ignore the CAA's and consequently, lose contact with those most in need of development - the Southern rural poor.

Table 16

Industrial Distribution of Experienced Labor Force,
Families with Farm Self-Employment Income

Industry	SOUTH						TOTAL US					
	Heads		Spouses		Other[a]		Heads		Spouse		Other	
Agricultural Production	51	ADJ[c]	7	ADJ	21	ADJ	56	ADJ	9	ADJ	23	ADJ
Other Agriculture	5	9	1	1	3	3	4	9	1	2	3	4
Mining	1	2	b	b	b	b	b	1	b	b	1	1
Construction	7	15	1	1	8	10	5	12	1	1	5	7
Manufacturing	9	18	26	28	21	27	11	25	20	22	21	27
Transportation	5	10	2	3	6	8	4	8	2	2	5	7
Trade	7	15	21	22	17	21	7	15	22	24	16	21
Services	15	31	42	45	24	31	13	30	45	49	26	33
TOTAL	100	100	100	100	100	100	100	100	100	100	100	100

[a] Note: The three categories are 1) Head of household, b) Spouse of head, c) Other adult (over 18 years of age) in household

[b] Less than 0.5 percent

[c] ADJ shows distribution not including Ag. Production

SOURCE: Data derived from tabulations of V1000 Public Use Sample Tapes, 1970 Census of Population. Only households in which the head reported earnings from farm self-employment were included.

0090

APPENDIX A

Maps of Southern Nonmetro Population, Total Employment and Manufacturing Employment

0061

BEST COP. BLE

BEST COPY AVAILABLE

MAP A-1. POPULATION CHANGES IN SOUTHERN SMSA AND DISTANT NONMETRO COUNTIES, 1960-1970[1]

	Percent	Symbol
Absolute loss	(minus $)	
Growth, but less than national average, 1960-1970 (13.3 percent)	(0-13.2)	
Growth faster than nation, but not twice as fast	(13.3-26.5)	
Growth at least twice as fast as the nation	(26.6+)	

1. Counties 0-50 miles from SMSA are omitted. SMSA's are indicated by a heavy border.

SOURCE: 1960 and 1970 Census of the Population.

BEST COPY AVAILABLE

0062

BEST COPY AVAILABLE

MAP A-2. TOTAL NONFARM EMPLOYMENT[1] CHANGES IN SOUTHERN SMSA AND DISTANT NONMETRO COUNTIES, 1959-1969[2]

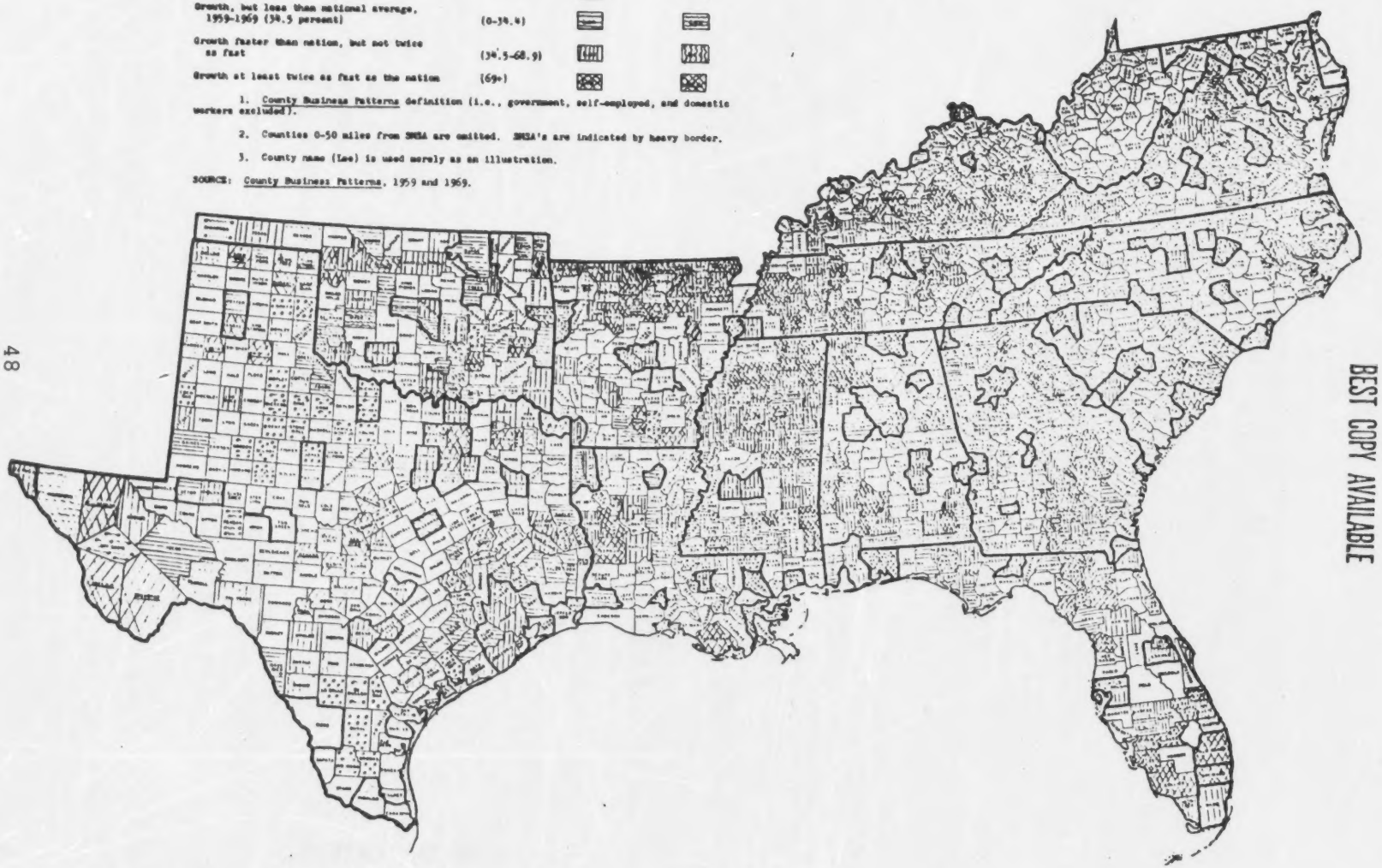
	Percent	Symbol[3]	1959 base less than 1,000 Symbol
Absolute loss	(minus $)	Lee	Lee
Growth, but less than national average, 1959-1969 (38.5 percent)	(0-38.4)		
Growth faster than nation, but not twice as fast	(38.5-68.9)		
Growth at least twice as fast as the nation	(69+)		

1. County Business Patterns definition (i.e., government, self-employed, and domestic workers excluded).

2. Counties 0-50 miles from SMSA are omitted. SMSA's are indicated by heavy border.

3. County name (Lee) is used merely as an illustration.

SOURCE: County Business Patterns, 1959 and 1969.



BEST COPY AVAILABLE

0063

BEST COPY AVAILABLE

MAP A-3. MANUFACTURING EMPLOYMENT[1] CHANGES IN SOUTHERN SMSA AND DISTANT NONMETRO COUNTIES, 1959-1969[2]

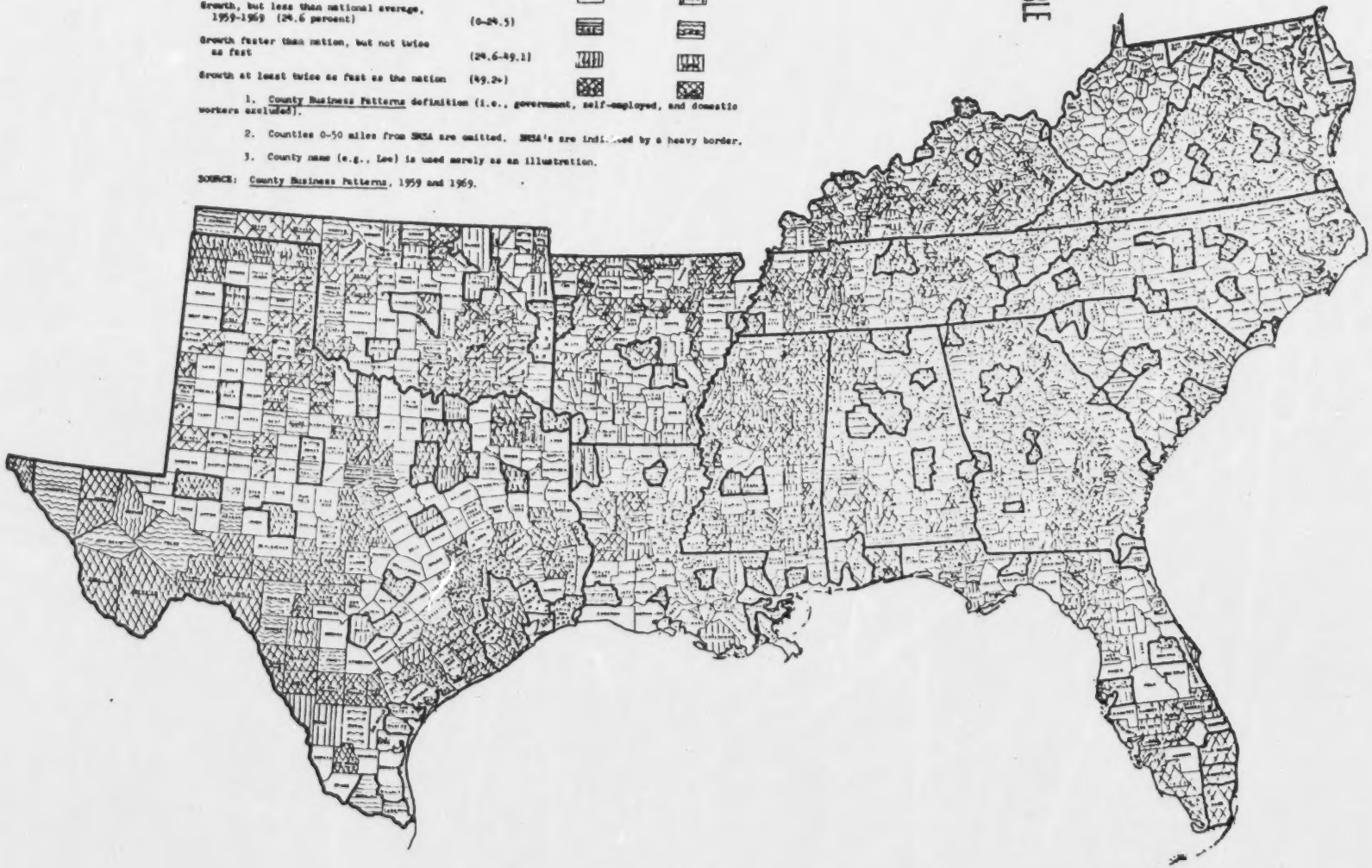
	Percent	Symbol[3]	1959 base 400 Symbol
Absolute loss	(minus %)	Lee	Lee
Growth, but less than national average, 1959-1969 (24.6 percent)	(0-24.5)		
Growth faster than nation, but not twice as fast	(24.6-49.1)		
Growth at least twice as fast as the nation	(49.2+)		

1. County Business Patterns definition (i.e., government, self-employed, and domestic workers excluded).

2. Counties 0-50 miles from SMSA are omitted. SMSA's are indicated by a heavy border.

3. County name (e.g., Lee) is used merely as an illustration.

SOURCE: County Business Patterns, 1959 and 1969.



BEST COPY AVAILABLE

0064

APPENDIX B

Employment Changes in "Success" and "Failure" Counties of the Border South, 1947-1971[1]

[1]All counties designated as success or failure on Map 1 for the states of Virginia, North Carolina, Kentucky, Tennessee, and Arkansas are included. The criteria used are given in Table 4.

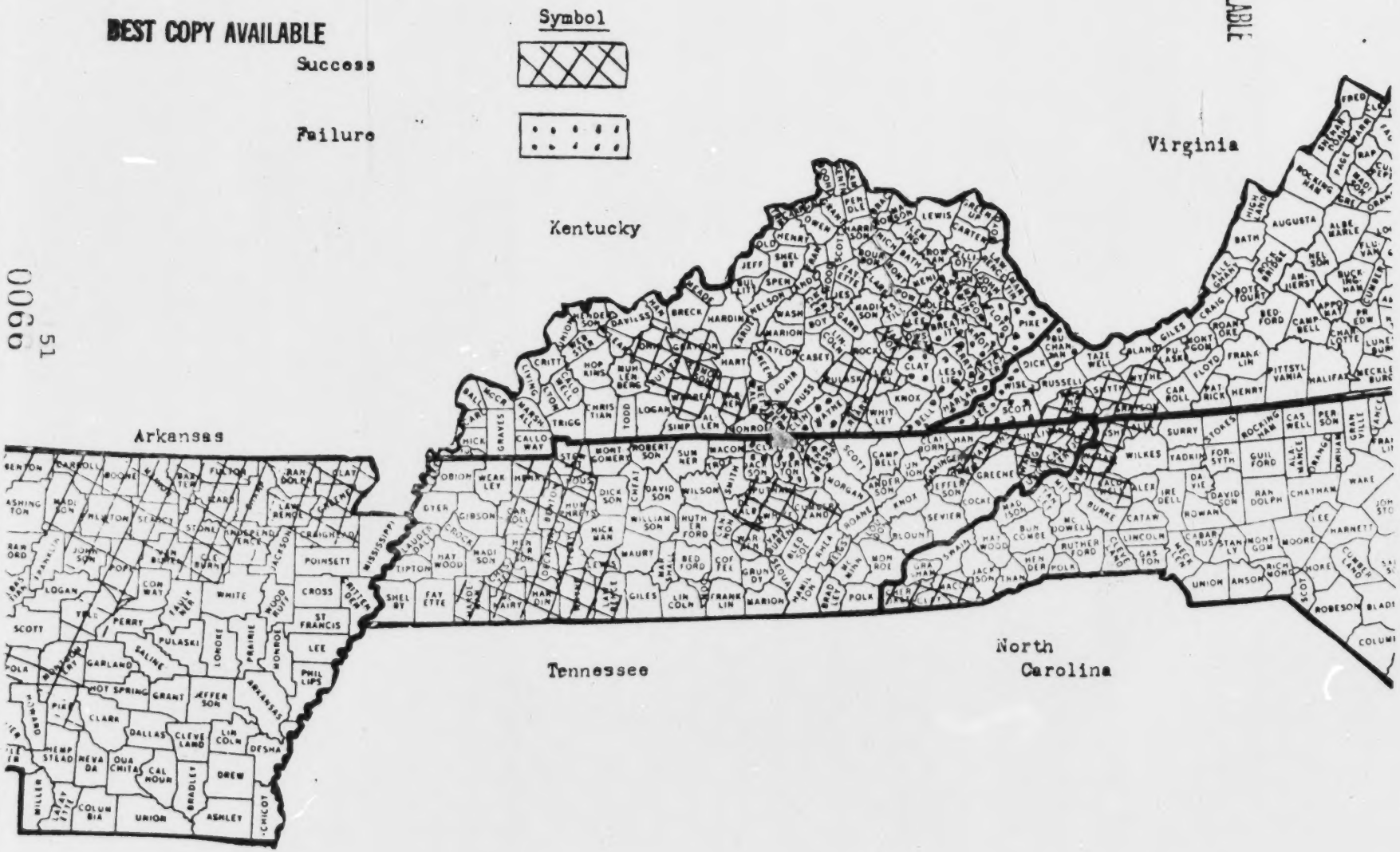
0065

BEST COPY AVAILABLE

MAP B-1. THE BORDER SOUTH SUCCESS AND FAILURE AREAS IN GROWTH PERFORMANCE

Growth Performance of Multi-County Nonmetro Areas
More Than Fifty Miles From An SMSA

BEST COPY AVAILABLE



0060 51

Table B-1

List of Counties Included in the Border South
Success and Failure Areas

1. Arkansas (29 Counties)

Success Counties (29)

Ashley
Baxter
Benton
Boone
Carroll
Chicot
Clay
Cleburne
Craighead
Desha
Fulton
Greene
Independence
Izard
Johnson
Lawrence
Madison
Marion
Montgomery
Newton
Pike
Polk
Pope
Randolph
Searcy
Sharp
Stone
Van Buren
Yell

Failure Counties (0)

none

2. Kentucky (29 Counties)

Success Counties (10)

Barren
Butler
Edmonson
Grayson
Laurel
Jackson
McCreary
Ohio
Pulaski
Warren

Failure Counties (19)

Bell
Breathitt
Clay
Clinton
Cumberland
Floyd
Harlan
Knott
Lee
Leslie
Letcher
Magoffin
Metcalf
Morgan
Perry
Pike
Owsley
Wayne
Wolfe

0067

Table B-1 (Continued)

3. North Carolina (8 Counties)

Success Counties (8)	Failure Counties (0)
Alleghany	none
Ashe	
Avery	
Caldwell	
Cherokee	
Clay	
Macon	
Watauga	

4. Tennessee (31 Counties)

Success Counties (27)			Failure Counties (4)
Benton	Hawkins	Madison	Clay
Carroll	Henderson	Perry	Fentress
Chester	Henry	Putnam	Jackson
Cumberland	Houston	Stewart	Pickett
Decatur	Humphreys	Sullivan	
DeKalb	Johnson	Warren	
Hamblen	Lawrence	Washington	
Hardeman	Lewis	Wayne	
Hardin	McNairy	White	

BEST COPY AVAILABLE

0068

Table B-1 (Continued)

5. Virginia (16 Counties)	
Success Counties (12)	Failure Counties (4)
Albemarle	Buchanan
Augusta	Lee
Bath	Scott
Frederick	Wise
Fluvanna	
Grayson	
Highland	
Rockingham	
Shenandoah	
Smythe	
Washington	
Wythe	

0069

Table B-2
The Border South, A Summary Table:
Change of Manufacturing Employment at the SIC Two-Digit Level,
1947-1971, For Selected Industries

INDUSTRY	SIC No.	EMPLOYMENT 1947 Number of Jobs	1958 Number	1958 Ann. Chg '47-'58 Number	1967 Number	1967 Ann. Chg '58-'67 Number	1971 Number	1971 Ann. Chg '67-'71 Number
I-Selected Traditional Industries								
FOOD	20							
Total Cos.		9,398	10,776	125	17,221	716	22,208	1,248
Success Cos.		8,590	9,868	116	16,065	689	21,262	1,300
Failure Cos.		808	908	9	1,156	27	946	-52
TEXTILES	22							
Total Cos.		14,578	9,986	-418	16,182	688	18,030	462
Success Cos.		14,439	9,978	-406	16,126	683	18,030	476
Failure Cos.		139	8	-12	56	5	--	-14
APPAREL	23							
Total Cos.		9,953	16,850	627	34,726	1,986	52,482	4,239
Success Cos.		9,577	15,042	497	32,028	1,887	46,112	3,521
Failure Cos.		376	1,808	130	2,698	99	6,370	918
LUMBER	24							
Total Cos.		19,9[illegible]	16,568	-303	19,721	350	12,846	-1,719
Success Cos.		16,061	13,724	-212	17,537	424	12,058	-1,370
Failure Cos.		3,844	2,844	-91	2,184	-74	788	-349
II-Selected Metal Fabricaring Industries								
NONELEC. MACHINES	35							
Total Cos.		1,039	4,020	271	7,810	421	9,994	546
Success Cos.		991	3,872	262	7,426	395	9,785	590
Failure Cos.		48	148	9	384	26	209	-44
ELEC. MACHINES	36							
Total Cos.		306	2,300	181	10,741	938	17,124	1,596
Success Cos.		306	2,292	180	10,688	933	16,914	1,557
Failure Cos.		-	8	1	53	5	209	39
TRANSPOR. EQUIP.	37							
Total Cos.		24	2,200	198	4,480	253	6,478	500
Success Cos.		24	2,104	189	4,312	245	6,090	445
Failure Cos.		-	96	9	168	8	388	55

SOURCES: 1) For 1947, 1958 and 1967 employment, U.S. Department of Commerce, Bureau of Census. Census of Manufacturers. Washington, D.C.: U.S. Government Printing Office.
2) For 1971, U.S. Department of Commerce, Bureau of Census. County Business Patterns. Washington, D.C.: U.S. Government Printing Office.

BEST COPY AVAILABLE

0070

Table B-3

The Border South: Total Manufacturing Employment, 1947-1971

Category	Total Manufacturing Employment	Change From Previous Period		
			Annual Average	
	Number	Number	Number Of Jobs	Percent
1947				
Total Counties	88,897	-	-	-
Success Counties	83,381	-	-	-
Failure Counties	5,516	-	-	-
1958				
Total Counties	116,840	27,943	2,540	2.5
Success Counties	110,153	26,772	2,434	2.6
Failure Counties	6,687	1,171	106	1.8
1967				
Total Counties	184,800	67,960	7,551	5.9
Success Counties	179,400	69,247	7,694	5.6
Failure Counties	5,400	-1,287	-143	-2.4
1971				
Total Counties	213,864	29,064	7,226	4.3
Success Counties	204,078	24,678	6,170	3.3
Failure Counties	9,786	4,386	1,097	16.0

SOURCES: (1) For 1947, 1958, and 1967 employment, U.S. Department of Commerce, Bureau of Census. Census of Manufacturers. Washington, D.C.: U.S. Government Printing Office.

(2) For 1971, United States Department of Commerce, Bureau of Census. County Business Patterns. Washington, D.C.: U.S. Government Printing Office.

0071

Table B-4

Arkansas: Total Manufacturing Employment, 1947-1971

Category	Total Manufacturing Employment		
		Change From Previous Period	
	Number	Number	Annual Average, Number
1947 Total Counties (All Success)	12,227	-	-
1958 Total Counties (All Success)	18,733	6,506	591
1967 Total Counties (All Success)	31,200	12,467	1,385
1971 Total Counties (All Success)	40,356	9,156	2,289

SOURCES: (1) For 1947, 1958 and 1967 employment, U.S. Department of Commerce, Bureau of Census. Census of Manufacturers. Washington, D.C.: U.S. Government Printing Office.

(2) For 1971, United States Department of Commerce, Bureau of Census. County Business Patterns. Washington, D.C.: U.S. Government Printing Office.

BEST COPY AVAILABLE

0072

Table B-5

Kentucky: Total Manufacturing Employment, 1947-1971

Category	Total Manufacturing Employment	Change From Previous Period	
	Number	Number	Annual Average Number
1947			
Total Counties	8,302	-	-
Success Counties	4,442	-	-
Failure Counties	3,680	-	-
1958			
Total Counties	9,663	1,361	124
Success Counties	6,239	1,797	163
Failure Counties	3,424	-436	-40
1967			
Total Counties	15,300	5,637	626
Success Counties	12,400	6,161	685
Failure Counties	2,900	-524	-58
1971			
Total Counties	19,972	4,672	1,168
Success Counties	14,600	2,299	575
Failure Counties	5,093	2,193	548

SOURCES: (1) For 1947, 1958, and 1967 employment, U.S. Department of Commerce, Bureau of Census. Census of Manufacturers. Washington, D.C.: U.S. Government Printing Office.

(2) For 1971, United States Department of Commerce, Bureau of Census. County Business Patterns. Washington, D.C.: U.S. Government Printing Office.

0073

BEST COPY AVAILABLE

Table B-6

North Carolina: Total Manufacturing Employment, 1947-1971

Category	Total Manufacturing Employment		
		Change From Previous Period	
	Number	Number	Annual Average Number
1947 Total Counties (All Success)	9,540	-	-
1958 Total Counties (All Success)	13,696	4,156	378
1967 Total Counties (All Success)	22,800	9,104	1,012
1971 Total Counties (All Success)	23,738	938	235

SOURCES: (1) For 1947, 1958, and 1967 employment, U.S. Department of Commerce, Bureau of Census. Census of Manufacturers. Washington, D.C.: U.S. Government Printing Office.

(2) For 1971, United States Department of Commerce, Bureau of Census. County Business Patterns. Washington, D.C.: U.S. Government Printing Office.

0074

Table B-7

Tennessee: Total Manufacturing Employment, 1947-1971

CATEGORY	Total Manufacturing Employment		
	No.	Chg. From No.	Previous Per. Ann. Aver. No.
1947			
Total Counties	36,896	-	-
Success Counties	36,286	-	-
Failure Counties	610	-	-
1958			
Total Counties	53,969	17,073	1,552
Success Counties	51,767	15,481	1,407
Failure Counties	2,202	1,592	145
1967			
Total Counties	87,400	33,431	3,715
Success Counties	85,800	34,033	3,781
Failure Counties	1,600	-602	-67
1971			
Total Counties	99,527	12,127	3,032
Success Counties	96,601	10,801	2,700
Failure Counties	2,926	1,326	332

SOURCES: (1) For 1947, 1958, and 1967 employment - U.S. Department of Commerce, Bureau of Census. Census of Manufacturers. Washington, D.C.: U.S. Government Printing Office.

(2) For 1971, United States Department of Commerce, Bureau of Census. County Business Patterns. Washington, D. C.: U.S. Government Printing Office.

0075

Table B-8

Virginia: Total Manufacturing Employment, 1947-1971

CATEGORY	Total Manufacturing Employment		
	No.	Chg. From No.	Previous Per. Ann. Aver. No.
1947			
Total Counties	21,932	--	--
Success Counties	20,886	--	--
Failure Counties	1,046	--	--
1958			
Total Counties	20,779	-1,153	-105
Success Counties	19,718	15	1
Failure Counties	1,061	-1,168	-106
1967			
Total Counties	28,100	7,321	813
Success Counties	27,200	7,482	831
Failure Counties	900	-161	-18
1971			
Total Counties	30,451	2,351	588
Success Counties	28,684	1,484	371
Failure Counties	1,767	867	217

SOURCES: (1) For 1947, 1958, and 1967 employment - U.S. Department of Commerce, Bureau of Census. Census of Manufacturers. Washington, D.C.: U.S. Government Printing Office.

(2) For 1971, United States Department of Commerce, Bureau of Census. County Business Patterns. Washington, D.C.: U.S. Government Printing Office.

0076

BEST COPY AVAILABLE

Table B-9

The Border South: Manufacturing Employment at the SIC Two-Digit Level, 1947-1971, Combined Success and Failure Counties

Industry	SIC Number	1947 Number of Jobs	1958 Number of Jobs	Change, 1947-58 Number	Change, 1947-58 Percent	1967 Number of Jobs	Change, 1958-67 Number	Change, 1958-67 Percent	1971 Number of Jobs	Change, 1967-71 Number	Change, 1967-71 Percent
Food	20	9,398	10,776	1,378	14.6	17,221	6,445	59.8	22,234	5,013	29.1
Tobacco	21	508	208	300	59.0	56	-152	-73.0	-	-56	-100.0
Textiles	22	14,478	9,986	4,492	31.0	16,182	6,196	62.0	18,030	1,848	11.4
Apparel	23	9,953	16,850	6,897	69.2	34,726	17,876	106.0	51,621	16,895	48.6
Lumber	24	19,905	16,568	-3,247	16.3	19,721	3,153	19.0	12,508	-7,213	-36.5
Furniture	25	7,371	9,208	1,837	24.9	20,455	11,247	122.1	23,941	3,486	17.0
Paper	26	2,910	3,049	139	4.7	5,310	2,261	74.1	5,941	631	11.8
Printing	27	3,982	4,329	347	8.7	6,162	1,833	42.3	5,008	-1,154	-18.7
Chemical	28	7,016	12,390	5,374	76.5	16,367	3,977	32.0	7,072	-9,295	-56.7
Petroleum & Coal Products	29	324	108	-216	-66.6	128	20	18.5	-	-128	-100.0
Rubber & Plastics	30	566	832	266	41.9	2,732	1,900	228.3	4,184	1,452	76.4
Leather	31	2,659	5,272	2,613	98.2	11,276	6,004	113.8	10,996	4,992	83.1
Stone, Clay & Glass	32	5,121	4,180	-941	-18.3	6,359	2,179	52.1	5,702	-657	-10.3
Primary Metal	33	1,888	636	1,252	66.3	2,302	1,666	261.9	2,689	387	16.8
Metal Fabrication	34	3,046	2,372	674	22.1	3,754	1,382	58.2	6,421	2,667	71.0
Nonelectrical Machinery	35	1,039	4,020	2,981	286.9	7,819	3,799	94.5	9,785	5,986	157.5
Electrical Machinery	36	306	2,300	1,994	651.6	10,741	8,441	367.0	17,124	6,383	59.4
Transportation Equipment	37	24	2,200	2,176	9066.6	4,480	2,280	103.6	6,478	1,998	44.5
Instruments	38	8	304	296	3700.0	704	400	131.5	796	92	13.0
Miscellaneous Manufacturing	39	496	4,790	4,294	965.7	3,352	-1,438	-30.0	3,378	26	0.7

SOURCES: 1) For 1947, 1958 and 1967 employment, U.S. Department of Commerce, Bureau of Census, Census of Manufacturers. Washington, D.C.: U.S. Government Printing Office.

2) For 1971, U.S. Department of Commerce, Bureau of Census. County Business Patterns. Washington, D.C.: U.S. Government Printing Office.

62
0071

Table B-10

The Border South: Manufacturing Employment at the SIC Two-Digit Level, 1947-1971, For Success Counties

Industry	SIC Number	1947 Number Of Jobs	1958 Number Of Jobs	Change, 1947-58 Number	Change, 1947-58 Percent	1967 Number Of Jobs	Change, 1958-67 Number	Change, 1958-67 Percent	1971 Number Of Jobs	Change, 1967-71 Number	Change, 1967-71 Percent
Food	20	8,590	9,868	1,278	14.8	16,065	6,197	62.7	21,262	5,197	32.3
Tobacco	21	508	208	-300	-144.2	56	-152	-73.0	-	-56	-100.0
Textiles	22	14,339	9,978	-4,361	-30.4	16,126	6,148	61.6	18,030	1,848	11.4
Apparel	23	9,577	15,042	5,465	57.0	32,028	16,986	112.9	46,112	14,084	82.9
Lumber	24	16,061	13,724	-2,337	-14.5	17,537	3,813	27.7	12,058	-5,479	-31.2
Furniture	25	7,347	9,164	1,817	24.7	20,343	11,179	121.9	23,941	3,598	17.6
Paper	26	2,862	3,049	187	6.5	5,310	2,261	74.1	5,941	631	11.8
Printing	27	3,750	4,057	307	8.1	5,810	1,753	43.2	5,008	-802	-13.8
Chemical	28	7,016	12,242	5,226	74.4	16,219	3,977	32.4	7,072	-9,147	-56.3
Petroleum & Coal Products	29	56	100	44	78.5	120	20	20.0	-	-120	-100.0
Rubber & Plastics	30	566	824	258	45.5	2,684	1,860	225.7	4,148	1,500	55.8
Leather	31	2,459	5,132	2,673	108.7	11,088	5,956	116.0	10,336	-752	-6.7
Stone, Clay & Glass	32	4,953	4,052	-901	18.1	6,143	2,091	51.6	5,490	-653	-10.6
Primary Metal	33	1,888	564	-1,324	70.1	2,198	1,634	289.7	2,689	491	22.3
Metal Fabrication	34	3,038	2,364	-674	-22.1	3,730	1,366	57.7	6,421	2,619	72.1
Nonelectrical Machinery	35	991	3,872	2,881	290.7	7,426	3,544	91.7	9,785	2,359	31.7
Electrical Machinery	36	306	2,292	1,986	649.0	10,688	8,396	366.3	16,914	6,226	58.2
Transportation Equipment	37	24	2,104	2,080	8,666.6	4,312	2,208	104.9	6,088	1,776	41.1
Instruments	38	-	304	304	not defined	696	392	128.9	796	100	14.3
Miscellaneous Manufacturing	39	480	4,766	4,286	892.9	3,344	-1,422	-29.8	3,378	34	1.0

SOURCES: 1) For 1947, 1958, and 1967 employment, U.S. Department of Commerce, Bureau of Census. Census of Manufacturers. Washington, D.C.: U.S. Government Printing Office.

2) For 1971, United States Department of Commerce, Bureau of Census. County Business Patterns. Washington, D.C.: U.S. Government Printing Office.

0078

BEST COPY AVAILABLE

Table B-11

The Border South: Manufacturing Employment at the SIC Two-Digit Level, 1947-1971, For Failure Counties

Industry	SIC Number	1947 Number of Jobs	1958 Number of Jobs	Change, 1947-1958 Number	Change, 1947-1958 Percent	1967 Number of Jobs	Change, 1967 Number	Change, 1967 Percent	1971 Number of Jobs	Change, 1971 Number	Change, 1971 Percent
Food	20	808	908	100	12.3	1,156	248	27.3	946	-210	-18.1
Tobacco	21	-	-	-	-	-	-	-	-	-	-
Textiles	22	139	8	-131	-94.2	56	48	600.0	-	-56	-100.0
Apparel	23	376	1,808	1,432	380.8	2,698	890	49.2	6,370	3,672	136.1
Lumber	24	3,844	2,844	-1,000	-26.0	2,184	-660	-23.2	788	1,396	-63.9
Furniture	25	24	44	20	83.3	112	68	154.5	-	-112	-100.0
Paper	26	48	-	-48	-100.0	-	-	-	-	-	-
Printing	27	232	272	-40	17.2	352	80	29.4	-	-352	-100.0
Chemical	28	-	148	148	not defined	148	0	0.0	-	-148	-100.0
Petroleum & Coal Products	29	268	8	-260	-97.0	8	0	0.0	-	-8	-100.0
Rubber & Plastics	30	-	8	8	not defined	48	40	500.0	-	-48	-100.0
Leather	31	200	140	-60	-30.0	188	48	34.2	1,075	887	471.8
Stone, Clay & Glass	32	168	128	-40	-23.8	216	88	68.7	212	-4	-1.8
Primary Metal	33	-	72	72	not defined	154	32	44.4	-	-104	-100.0
Metal Fabrication	34	8	8	0	0.0	24	16	200.0	-	-24	-100.0
Nonelectrical Machinery	35	48	148	100	208.3	384	236	159.4	209	-27	-11.4
Electrical Machinery	36	-	8	8	not defined	53	45	562.5	209	164	309.4
Transportation Equipment	37	-	96	96	not defined	168	72	75.0	388	316	438.8
Instruments	38	8	-	-8	-100.0	8	8	not defined	-	-8	-100.0
Miscellaneous Manufacturing	39	16	24	8	50.0	8	-16	-66.6	-	-8	-100.0

SOURCES: 1) For 1947, 1958 and 1967 employment, U.S. Department of Commerce, Bureau of Census, Census of Manufacturers. Washington, D.C.: U.S. Government Printing Office.

2) For 1971, U.S. Department of Commerce, Bureau of Census, County Business Patterns. Washington, D.C.: U.S. Government Printing Office.

0079

Table B-12

ARKANSAS: Manufacturing Employment at the SIC Two-Digit Level, 1947-1971

INDUSTRY	SIC Number	EMPLOYMENT 1947 Total Counties	1958 Total Counties[a]	1967 Total Counties[a]	1971 Total Counties[a]
Food	20	2,516	3,848	6,879	10,693
Tobacco	21	-	-	-	-
Textiles	22	148	228	471	812
Apparel	23	497	1,972	3,570	7,176
Lumber	24	5,623	4,344	6,680	4,960
Furniture	25	64	280	1,070	1,238
Paper	26	806	796	1,968	2,659
Printing	27	432	512	752	107
Chemical	28	282	260	80	830
Petroleum & Coal Prod.	29	48	28	-	-
Rubber and Plastics	30	-	8	712	691
Leather	31	748	2,268	4,001	4,396
Stone, Clay & Glass	32	357	432	764	1,164
Primary Metal	33	1,760	52	698	455
Metal Fabricating	34	8	544	894	1,122
Nonelectrical Machinery	35	148	296	1,362	1,457
Electrical Machinery	36	-	608	2,104	4,284
Transportation Equipment	37	16	176	372	1,831
Instruments	38	-	-	48	-
Miscellaneous Manufact.	39	248	372	628	674

[a]
Note: All are success counties.

SOURCES: 1) For 1947, 1958 and 1967 employment: U.S. Department of Commerce, Bureau of Census, Census of Manufacturers. Washington, D.C.: U.S. Government Printing Office.

2) For 1971, United States Department of Commerce, Bureau of Census. County Business Patterns. Washington, D.C.: U.S. Government Printing Office.

0080

BEST COPY AVAILABLE

Table B-13

KENTUCKY: Manufacturing Employment at the SIC Two-Digit Level, 1947-1971

INDUSTRY	SIC Number	1947 Total Counties	1947 Success Counties	1947 Failure Counties	1958 Total Counties	1958 Success Counties	1958 Failure Counties	1967 Total Counties	1967 Success Counties	1967 Failure Counties	1971 Total Counties	1971 Success Counties	1971 Failure Counties
Food	20	1,394	778	616	1,796	1,152	644	2,196	1,424	772	2,261	1,812	449
Tobacco	21	508	508	-	208	208	-	56	56	-	146	146	-
Textiles	22	139	-	139	8	-	8	416	360	56	449	449	-
Apparel	23	1,570	1,570	-	2,700	2,280	420	4,702	3,968	734	7,655	5,231	242
Lumber	24	4,094	1,226	2,868	3,008	976	2,032	3,084	1,572	1,512	1,300	814	486
Furniture	25	24	24	-	168	160	8	332	276	56	354	354	-
Paper	26	48	-	48	-	-	-	48	48	-	-	-	-
Printing	27	328	160	168	368	160	208	536	288	248	506	506	-
Chemical	28	-	-	-	84	76	8	228	220	8	211	211	-
Petroleum & Coal Prod.	29	72	8	64	80	72	8	72	64	8	-	-	-
Rubber and Plastics	30	-	-	-	8	-	8	48	-	48	-	-	-
Leather	31	200	-	200	168	28	140	244	56	188	1,285	210	1,075
Stone, Clay & Glass	32	104	56	48	128	56	72	576	432	144	659	659	-
Primary Metal	33	8	8	-	28	-	28	-	-	-	-	-	-
Metal Fabricating	34	16	8	8	40	40	-	450	442	8	743	743	-
Nonelectrical Machinery	35	64	16	48	912	788	124	1,888	1,632	256	3,192	2,983	209
Electrical Machinery	36	258	258	-	8	-	8	2,050	1,854	196	2,279	2,070	209
Transportation Equipment	37	-	-	-	88	-	88	216	56	160	388	-	388
Instruments	38	8	-	8	-	-	-	8	-	8	-	-	-
Miscellaneous Manufact.	39	16	-	16	68	44	24	96	88	8	-	-	-

SOURCES: 1) For 1947, 1958 and 1967 employment: U.S. Department of Commerce, Bureau of Census, Census of Manufacturers, Washington, D.C.: U.S. Government Printing Office.
2) For 1971, United States Department of Commerce, Bureau of Census. County Business Patterns. Washington, D.C.: U.S. Government Printing Office.

T800 0081
99

Table B-14

NORTH CAROLINA: Manufacturing Employment at the SIC Two-Digit Level, 1947-1971

Industry	SIC Number	EMPLOYMENT 1947 Total Counties[a]	1958 Total Counties[a]	1967 Total Counties[a]	1971 Total Counties[a]
Food	20	112	220	200	-
Tobacco	21	-	-	-	-
Textiles	22	3,328	3,664	5,004	5,380
Apparel	23	307	868	3,034	5,314
Lumber	24	1,441	1,436	2,300	1,682
Furniture	25	3,984	5,220	7,916	10,862
Paper	26	8	36	104	271
Printing	27	64	104	128	-
Chemical	28	120	84	184	-
Petroleum & Coal Products	29	-	-	-	-
Rubber & Plastics	30	-	-	-	259
Leather	31	48	-	416	660
Stone, Clay & Glass	32	200	416	620	503
Primary Metal	33	8	-	140	210
Metal Fabrication	34	48	-	88	-
Nonelectrical Machinery	35	-	196	152	222
Electrical Machinery	36	48	440	1,460	2,743
Transportation Equipment	37	-	-	-	-
Instruments	38	-	-	140	210
Miscellaneous Manufacturing	39	48	304	1,978	665

SOURCES: 1) For 1947, 1958 and 1967 employment, U.S. Department of Commerce, Bureau of Census, Census of Manufacturers. Washington, D.C.: U.S. Government Printing Office.

2) For 1971, United States Department of Commerce, Bureau of Census. County Business Patterns. Washington, D.C.: U.S. Government Printing Office.

BEST COPY AVAILABLE

0082

BEST COPY AVAILABLE

Table B-15

TENNESSEE: Manufacturing Employment at the SIC Two-Digit Level, 1947-1971

INDUSTRY	SIC Number	1947 Total Counties	1947 Success Counties	1947 Failure Counties	1958 Total Counties	1958 Success Counties	1958 Failure Counties	1967 Total Counties	1967 Success Counties	1967 Failure Counties	1971 Total Counties	1971 Success Counties	1971 Failure Counties
Food	20	2,540	2,524	16	2,584	2,420	164	3,672	3,516	156	3,578	3,349	229
Tobacco	21	-	-	-	-	-	-	-	-	-	-	-	-
Textiles	22	6,287	6,287	-	3,128	3,128	-	6,747	6,747	-	6,498	6,498	-
Apparel	23	5,507	5,279	228	9,518	8,278	1,240	18,215	16,399	1,816	24,247	21,389	2,858
Lumber	24	6,499	6,075	424	5,840	5,532	308	5,833	5,481	352	4,876	4,708	168
Furniture	25	1,623	1,615	8	2,840	2,812	28	9,878	9,830	48	9,706	9,706	-
Paper	26	2,048	2,048	-	2,217	2,217	-	3,280	3,280	-	3,011	3,011	-
Printing	27	2,790	2,782	8	3,081	3,073	8	4,458	4,442	16	4,392	4,392	-
Chemical	28	4,240	4,240	-	9,570	9,570	-	13,699	13,699	-	4,715	4,715	-
Petroleum & Coal Prod.	29	-	-	-	-	-	-	56	56	-	-	-	-
Rubber and Plastics	30	16	16	-	68	68	-	908	908	-	1,990	1,990	-
Leather	31	1,428	1,428	-	2,836	2,836	-	6,615	6,615	-	5,280	5,280	-
Stone, Clay & Glass	32	2,950	2,942	8	1,604	1,588	16	3,233	3,201	32	2,051	2,051	-
Primary Metal	33	64	64	-	496	496	-	1,212	1,212	-	2,024	2,024	-
Metal Fabricating	34	466	466	-	784	784	-	1,032	1,024	8	2,779	2,779	-
Nonelectrical Machinery	35	551	551	-	1,728	1,728	-	2,922	2,922	-	6,397	6,397	-
Electrical Machinery	36	-	-	-	476	476	-	2,550	2,542	8	8,155	8,155	-
Transportation Equipment	37	8	8	-	1,892	1,884	8	3,478	3,470	8	3,744	3,744	-
Instruments	38	-	-	-	164	164	-	258	258	-	796	796	-
Miscellaneous Manufact.	39	160	160	-	2,605	2,605	-	960	960	-	832	832	-

SOURCES: 1) For 1947, 1958 and 1967 employment: U.S. Department of Commerce, Bureau of Census, Census of Manufacturers, Washington, D.C.: U.S. Government Printing Office.

2) For 1971, United States Department of Commerce, Bureau of Census. County Business Patterns. Washington, D.C.: U.S. Government Printing Office.

0083

BEST COPY AVAILABLE

BEST COPY AVAILABLE

Table B-16

VIRGINIA: Manufacturing Employment at the SIC Two-Digit Level, 1947-1971

INDUSTRY	SIC Number	1947 Total Counties	1947 Success Counties	1947 Failure Counties	1958 Total Counties	1958 Success Counties	1958 Failure Counties	1967 Total Counties	1967 Success Counties	1967 Failure Counties	1971 Total Counties	1971 Success Counties	1971 Failure Counties
Food	20	2,836	2,660	176	2,328	2,228	100	4,274	4,046	228	5,770	5,501	269
Tobacco	21	-	-	-	-	-	-	-	-	-	-	-	-
Textiles	22	4,576	4,576	-	2,958	2,958	-	3,544	3,544	-	4,890	4,890	-
Apparel	23	2,072	1,924	148	1,792	1,644	148	5,205	5,057	148	11,937	10,849	1,088
Lumber	24	2,248	1,696	552	1,940	1,436	504	1,832	1,504	328	681	547	134
Furniture	25	1,676	1,660	16	700	692	8	1,259	1,251	8	2,135	2,135	-
Paper	26	-	-	-	-	-	-	-	-	-	-	-	-
Printing	27	368	312	56	264	208	56	288	200	88	-	-	-
Chemical	28	2,374	2,374	-	2,392	2,252	-	2,176	2,036	140	1,526	1,526	-
Petroleum & Coal Prod.	29	204	-	204	-	-	-	-	-	-	-	-	-
Rubber and Plastics	30	550	550	-	748	748	-	1,064	1,064	-	1,244	1,244	-
Leather	31	235	235	-	-	-	-	-	-	-	-	-	-
Stone, Clay & Glass	32	1,510	1,398	112	1,600	1,560	40	1,166	1,126	40	1,744	1,562	212
Primary Metal	33	48	48	-	60	16	44	252	148	104	-	-	-
Metal Fabricating	34	2,508	2,508	-	1,004	996	8	1,290	1,282	8	2,520	2,520	-
Nonelectrical Machinery	35	296	296	-	888	864	24	1,486	1,358	128	1,252	1,252	-
Electrical Machinery	36	-	-	-	768	768	-	2,736	2,729	8	744	744	-
Transportation Equipment	17	-	-	-	44	44	-	314	314	-	510	510	-
Instruments	38	-	-	-	140	140	-	200	200	-	-	-	-
Miscellaneous Manufact.	39	64	64	-	1,441	1,441	-	1,150	1,150	-	1,207	1,207	-

SOURCES: 1) For 1947, 1958 and 1967 employment: U.S. Department of Commerce, Bureau of Census, Census of Manufacturers. Washington, D.C.: U.S. Government Printing Office.

2) For 1971, United States Department of Commerce, Bureau of Census. County Business Patterns. Washington, D.C.: U.S. Government Printing Office.

0084
69

APPENDIX C

Employment Trends in Six Southern Case-Study Areas, 1940-1970[1]

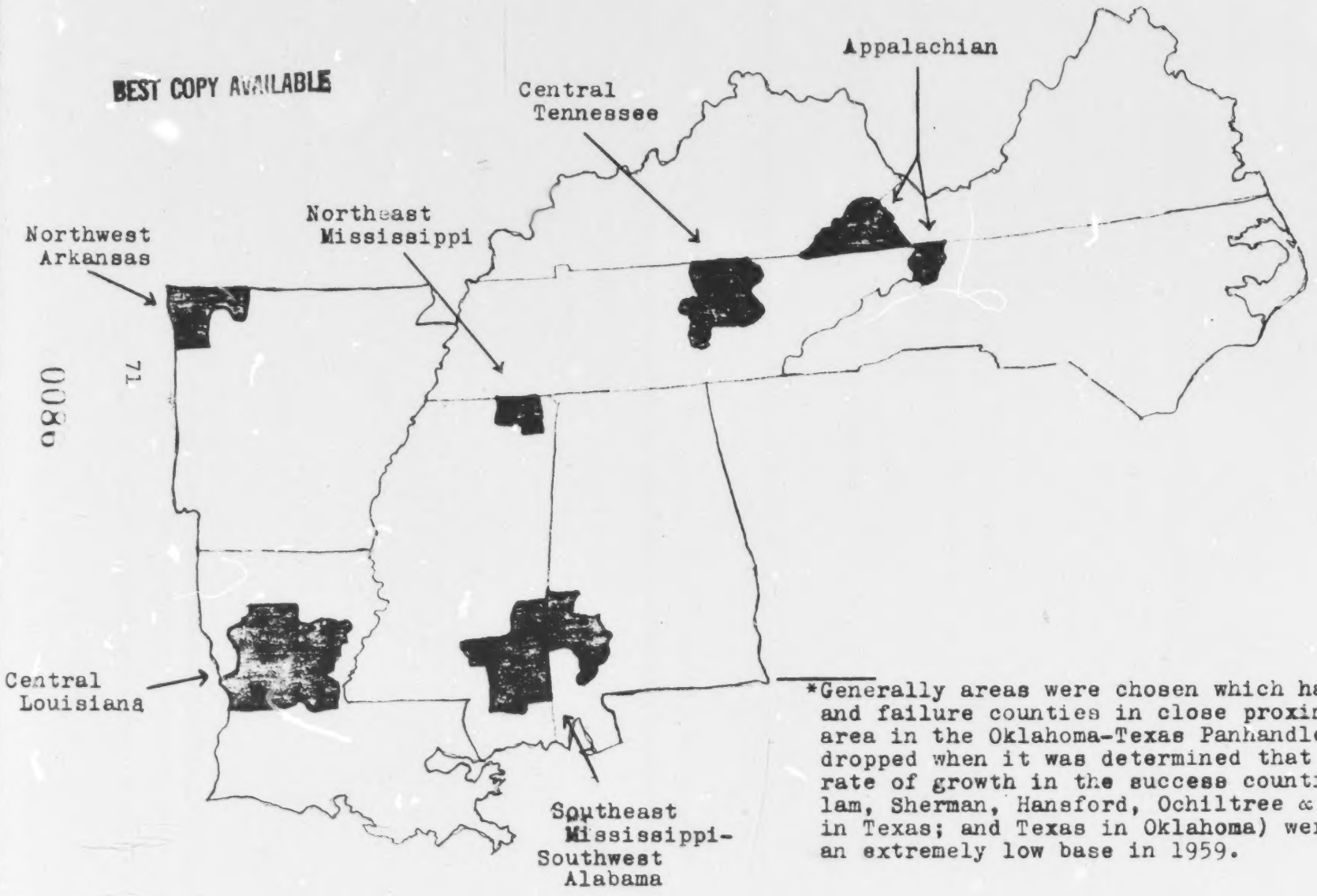
[1]These areas were chosen from Map 1. Generally areas with stagnant counties in close proximity to fast-growing counties were preferred, for comparison counties. However, two booming areas -- northeast Mississippi and northwest Arkansas -- lacked "failure" counties, so only "success" counties represent them.

0085

MAP C-1: SIX CASE-STUDY AREAS

BEST COPY AVAILABLE

BEST COPY AVAILABLE



0080 71

*Generally areas were chosen which had success and failure counties in close proximity. An area in the Oklahoma-Texas Panhandle was dropped when it was determined that the high rate of growth in the success counties (Dallam, Sherman, Hansford, Ochiltree & Lipscomb in Texas; and Texas in Oklahoma) were due to an extremely low base in 1959.

Table C-1

LIST OF COUNTIES INCLUDED IN SIX CASE-STUDY AREAS
(Total: 43)

1. Appalachian Area (11 counties)

Success Counties (5)	Failure Counties (6)
Johnson (Tenn.)	Bell (Ken.)
Carter (Tenn.)	Harlan (Ken.)
Avery (N.C.)	Letcher (Ken.)
Ashe (N.C.)	Lee (Va.)
Watauga (N.C.)	Scott (Va.)
	Wise (Va.)

2. Central Louisiana (8 counties)

Success Counties (4)	Failure Counties (4)
Natchitoches	Avoyelles
Rapides	Catahoula
Vernon	Grant
Winn	LaSalle

3. Central Tennessee (9 counties)

Success Counties (5)	Failure Counties (4)
Cumberland	Clay
DeKalb	Fentress
Putnam	Jackson
Warren	Pickett
White	

4. Northeast Mississippi (3 counties)

Success Counties (3)	Failure Counties (0)
Alcorn	
Prentiss	
Tippah	

5. Northwest Arkansas (3 counties)

Success Counties (3)	Failure Counties (0)
Benton	
Carroll	
Washington	

6. Southeast Mississippi - Southwest Alabama (9 counties)

Success Counties (5)	Failure Counties (4)
Choctaw (Ala.)	Forrest (Miss.)
Clarke (Ala.)	Jones (Miss.)
Clarke (Miss.)	Perry (Miss.)
Greene (Miss.)	Covington (Miss.)
Wayne (Miss.)	

0087

Table C-2 [1]
Appalachian Case-Study Area :
Employment Patterns, by Key Industries, 1940-1970

Category	Number of Counties	EMPLOYMENT									
				Change, 1940-50			Change, 1950-60			Change, 1960-70	
		1940	1950	Number	Percent	1960	Number	Percent	1970	Number	Percent
I. All Success Counties	5										
Total		25,714	32,858	7,144	27.8	30,103	-2,755	-8.4	38,577	8,474	28.2
Agriculture		13,517	12,409	-1,108	-8.2	5,881	-6,528	-52.6	2,458	-3,423	-58.2
Mining		267	188	-79	-29.6	361	173	92.0	189	-172	-47.6
Manufacturing		5,578	6,921	1,343	24.1	8,939	2,018	29.2	14,652	5,713	63.9
II. All Failure Counties	6										
Total		66,898	70,847	3,949	5.9	47,084	-23,763	-33.5	43,658	-3,426	-7.3
Agriculture		13,493	9,531	-3,962	-29.4	4,319	-5,212	-54.7	1,770	-2,549	-59.0
Mining		29,722	29,632	-90	-0.3	12,720	-16,912	-57.1	8,213	-4,507	-35.4
Manufacturing		3,930	4,752	822	20.9	4,533	-219	-4.6	6,262	1,729	38.1
III. All Counties Counties	11										
Total		92,612	103,705	11,093	12.0	77,187	-26,518	-25.6	82,235	5,048	6.5
Agriculture		27,010	21,940	-5,070	-18.8	10,200	-11,740	-53.5	4,228	-5,972	-58.5
Mining		29,989	29,820	-169	-0.6	13,081	-16,739	-56.1	8,402	-4,679	-35.8
Manufacturing		9,508	11,673	2,165	22.8	12,472	1,799	15.4	20,914	7,442	55.2

[1] This was composed of Johnson and Carter counties in Tennessee; Avery, Ashe, and Watauga in North Carolina; Bell, Harlan and Leteler in Kentucky; and Lee, Scott, and Wise in Virginia.

SOURCE: U.S. Department of Commerce, Bureau of Census, Census of Population, 1940, 1950, 1960, and 1970, Washington, D.C.: U.S. Government Printing Office.

0080

BEST COPY AVAILABLE

Table C-3 [1]
Central Louisiana Case-Study Area :
Employment Patterns by Key Industries, 1940-1970

Category	Number of Counties	EMPLOYMENT 1940	1950	Change, 1940-50 Number	Percent	1960	Change, 1950-60 Number	Percent	1970	Change, 1960-70 Number	Percent
I. All Success Counties	4										
Total		44,888	47,121	2,233	5.0	49,508	2,387	5.1	57,195	7,687	15.5
Agriculture		17,784	9,964	-7,820	-44.0	4,568	-5,396	-54.2	2,617	-1,951	-42.7
Mining		412	583	171	41.5	340	-243	-41.7	758	418	122.9
Manufacturing		5,658	6,519	861	15.2	6,083	-436	-6.7	7,576	1,493	24.5
II. All Failure Counties	4										
Total		22,843	20,133	-2,710	-11.9	19,637	-496	-2.5	20,379	742	3.8
Agriculture		13,428	10,528	-2,900	-21.6	4,240	-6,288	-59.7	2,406	-1,834	-43.3
Mining		664	1,166	502	75.6	965	-201	-17.2	1,219	254	26.3
Manufacturing		2,006	3,271	1,265	63.1	2,158	-1,113	-34.0	2,721	563	26.1
III. All Counties Counties	8										
Total		67,731	67,254	-477	-0.7	69,145	1,891	2.8	77,574	8,429	12.2
Agriculture		31,212	20,492	-10,720	-34.3	8,808	-11,684	-57.0	5,023	-3,785	-43.0
Mining		1,076	1,749	673	62.5	1,305	-444	-25.4	1,977	672	51.5
Manufacturing		7,664	9,790	2,126	27.7	8,241	-1,549	-15.8	10,297	2,056	24.9

[1] This was composed of the success counties of Natchitoches, Rapides, Vernon and Winn; and the stagnant counties of Avoyelles, Catahoula, Grant and LaSalle.

SOURCE: U.S. Department of Commerce, Bureau of Census. Census of Population, 1940, 1950, 1960 and 1970. Washington,D.C.: U.S. Government Printing Office.

0089

Table C-4

N.E. Mississippi Case-Study Area[1]:

Employment Patterns by Key Industries, 1940-1970

Category	Number of Counties	EMPLOYMENT 1940	1950	Change, 1940-'50 Number	Percent	1960	Change, 1950-'60 Number	Percent	1970	Change, 1960-'70 Number	Percent
I. All Success Counties Total	3	19,272	21,560	2,288	11.9	19,971	-1,589	-7.4	23,275	3,304	16.5
Agriculture		10,646	10,413	-233	-2.2	9,941	-472	-4.5	1,623	-8,318	-83.7
Mining		5	17	12	240.0	20	3	17.6	126	106	530.0
Manufacturing		2,602	2,884	282	10.8	5,501	2,617	90.7	9,711	4,210	76.5

[1] This area was composed of Alcorn, Prentiss, and Tippah counties.

SOURCE: U.S. Department of Commerce, Bureau of Census. Census of Population, 1940, 1950, 1960 and 1970. Washington, D.C.: U.S. Government Printing Office.

0030

BEST COPY AVAILABLE

Table C-5
Central Tennessee Case-Study Area[1]:
Employment Patterns by Key Industries, 1940-1970

Category	Number of Counties	EMPLOYMENT 1940	1950	Change, 1940-'50 Number	Percent	1960	Change, 1950-'60 Number	Percent	1970	Change, 1960-'70 Number	Percent
I. All Success Counties	5										
Total		25,163	30,511	5,348	21.3	32,367	1,856	6.1	40,810	8,443	26.1
Agriculture		15,611	11,202	-4,409	-28.2	5,946	-5,256	-46.9	2,935	-3,011	-50.6
Mining		379	932	553	145.9	635	-297	-31.9	248	-387	-60.9
Manufacturing		3,284	5,533	2,249	68.5	9,423	3,890	70.3	15,243	5,820	61.8
II. All Failure Counties	4										
Total		11,784	11,109	-675	-5.7	10,155	-954	-8.6	9,968	-187	-1.8
Agriculture		8,302	6,365	-1,937	-23.3	3,389	-2,976	-46.8	1,565	-1,824	-53.8
Mining		467	425	-42	-9.0	161	-264	-62.1	72	-89	-55.3
Manufacturing		936	1,274	338	36.1	2,946	1,672	131.2	3,719	773	26.2
III. All Counties											
Counties	9										
Total		36,947	41,620	4,673	12.6	42,522	902	2.2	50,778	8,256	19.4
Agriculture		23,913	17,567	-6,346	-26.5	9,335	-8,232	-46.9	4,500	-4,835	-51.8
Mining		846	1,357	511	60.4	796	-561	-41.3	320	-476	-59.8
Manufacturing		4,220	6,807	2,587	61.3	12,369	5,562	81.7	18,962	6,593	53.3

[1] This area was composed of the success counties of Cumberland, DeKalb, Putnam, Warren and White; and the failure counties of Clay, Fentress, Jackson and Pickett.

SOURCE: U.S. Department of Commerce, Bureau of Census, Census of Population, 1940, 1950, 1960 and 1970. Washington, D.C.: U.S. Government Printing Office.

0031

Table C-6

N.W. Arkansas Case-Study Area[1]:

Employment Patterns, by Key Industries, 1940-1970

Category	Number of Counties	EMPLOYMENT									
		1940	1950	Change, 1940-'50 Number	Change, 1940-'50 Percent	1960	Change, 1950-'60 Number	Change, 1950-'60 Percent	1970	Change, 1960-'70 Number	Change, 1960-'70 Percent
I. All Success Counties Total	3	27,996	36,085	8,089	28.9	36,766	681	1.9	52,958	16,192	44.0
Agriculture		2,734	2,492	-242	-8.9	1,227	-1,265	-50.8	730	-497	-40.5
Mining		63	36	-27	-42.9	52	16	44.4	94	42	80.8
Manufacturing		1,654	3,459	1,805	109.1	7,411	3,952	114.3	14,158	6,747	91.0

[1] This area was composed of Benton, Carroll, and Washington counties.

SOURCE: U.S. Department of Commerce, Bureau of Census, Census of Population, 1940, 1950, 1960 and 1970. Washington, D.C.: U.S. Government Printing Office.

0037

BEST COPY AVAILABLE

Table C-7
S.E. Mississippi - S.W. Alabama Case-Study Area[1]:
Employment Patterns, by Key Industries, 1940-1970

Category	Number of Counties	EMPLOYMENT									
		1940	1950	Change, 1940-'50		1960	Change, 1950-'60		1970	Change, 1960-'70	
				Number	Percent		Number	Percent		Number	Percent
I. All Success Counties	5										
Total		28,544	29,144	600	2.1	23,283	-5,861	-20.1	25,393	2,110	9.1
Agriculture		16,355	11,213	-5,142	-31.4	3,128	-8,085	-72.1	1,035	-2,093	-66.9
Mining		48	188	140	291.7	396	208	110.6	841	445	112.4
Manufacturing		5,128	8,009	2,881	56.2	8,194	185	2.3	10,402	2,208	26.9
II. All Failure Counties	4										
Total		33,845	41,763	7,918	23.4	43,127	1,364	3.3	47,006	3,879	9.0
Agriculture		10,997	8,624	-2,373	-21.6	3,623	-5,001	-58.0	1,838	-1,785	-49.3
Mining		105	538	433	412.4	790	252	46.8	1,427	637	80.6
Manufacturing		7,683	9,916	2,233	29.1	9,779	-137	-1.4	10,714	935	9.6
III. All Counties Counties	9										
Total		62,389	70,907	8,518	13.7	66,410	-4,497	-6.3	72,339	5,989	9.0
Agriculture		27,352	19,837	-7,515	-27.5	6,751	-13,086	-66.0	2,873	-3,878	-57.4
Mining		153	726	573	374.5	1,186	460	63.4	2,268	1,082	91.2
Manufacturing		12,811	17,925	5,114	39.9	17,973	48	0.3	21,116	3,143	17.5

[1]This area was composed of the success counties of Clarke, Greene and Wayne in Mississippi, and Choctaw and Clarke in Alabama; and the stagnant counties of Covington, Forrest, Jones and Perry.

SOURCE: U.S. Department of Commerce, Bureau of Census. Census of Population, 1940, 1950, 1960 and 1970. Washington, D.C.: U.S. Government Printing Office.

00333

APPENDIX D

Indiana Comparison Study

The Extent of Industrialization

A similar report for nonmetropolitan labor markets[1] in the South during the 1960's initially raised the questions: How extensive was nonfarm job growth in the 1960's? Which industries located there and what are the trends?[2]

The first question is the extent of nonmetropolitan job growth. Several urban and regional economists have held that nonmetropolitan nonfarm job growth would be minimal, except perhaps in counties contiguous to SMSA's (i.e., SMSA fringe areas), and would be dwarfed by the growth of SMSA counties. Their chief reason was that the greater external economies of metro areas (e.g., skilled, varied, and abundant labor supply; business services; cultural amenities; etc.) would make it relatively impossible to lure factories to locate in nonmetro labor markets.

First, the hypothesis that nonfarm job growth is (1) minimal and (2) overwhelmed by SMSA increases will be examined. The test will be to examine the rates of growth of total nonfarm and total manufacturing employment, from 1959 to 1969, for counties more than fifty miles from an SMSA (thus avoiding the SMSA fringe areas). The data from Table D-1 reveal that their rates of growth were respectable: nonfarm jobs increased by one-third and manufacturing by one-fourth during the 1960's. It also shows that these rates of increase were

---

[1] To avoid "SMSA" fringe areas, nonmetro labor markets were defined as counties more than 50 miles from an SMSA.

[2] Thomas Till, Rural Industrialization and Southern Rural Poverty in the 1960's. Published as a report under OEO Grant CG-6994. Austin, Texas: Center for the Study of Human Resources, University of Texas, August, 1972. Chapters 2 and 3 contain the relevant data.

0094

BEST COPY AVAILABLE

Table D-1

The Extent of Nonmetropolitan Industrialization in Indiana: Nonfarm and Manufacturing Employment, 1959-69, By Distance from the Nearest SMSA and by Size of the Largest City[1]

Category	Number of Counties	Total Nonfarm Employment, 1959	Total Nonfarm Employment Change, 1959-69		Manufacturing Employment, 1959	Total Manufacturing Employment Change, 1959-69	
			Number	Percent		Number	Percent
SMSA Counties	25	792,224	225,380	28.4	390,659	59,231	15.1
Counties 0-50 Miles from SMSA:							
Total	62	324,281	152,883	47.1	175,456	90,656	51.6
Main City Population More than 10,000	17	205,496	104,244	50.7	117,430	62,766	53.4
Main City Population 2,500-9,999	34	109,382	43,874	40.1	55,441	25,655	46.2
Main City Population Less than 2,500	11	9,403	4,765	50.6	2,585	2,235	86.4
Counties Over 50 Miles from SMSA:							
Total	5	18,717	5,915	31.6	9,663	2,576	26.6
Main City Population More than 10,000	3	15,280	6,064	39.6	7,594	3,150	41.4
Main City Population 2,500-9,999	2	3,437	-149	-4.3	2,069	-574	-27.7
Main City Population Less than 2,500	0						
All Nonmetro Counties:							
Total	67	342,998	158,798	46.2	185,119	93,232	50.3
Main City Population More than 10,000	20	220,776	110,308	49.9	125,024	65,916	52.7
Main City Population 2,500-9,999	36	112,819	43,725	38.7	57,510	25,081	43.6
Main City Population Less than 2,500	11	9,403	4,765	50.6	2,585	2,235	86.4

[1] City-size as of 1960.

SOURCE: United States Department of Commerce, Bureau of Census. County Business Patterns. Washington, D C.: U.S. Government Printing Office, 1959, 1969.

0036

higher than those of the SMSA's. But the significance of such comparisons is reduced by the fact that only five of Indiana's 92 counties are more than 50 miles from an SMSA.

The next topic is the differences between Indiana nonmetro labor markets and those of the South (Table D-3). First, the percentage of Southern counties more than 50 miles from an SMSA is far greater than in Indiana (or, presumably, than in other states of the Old Manufacturing Belt).[3] Secondly, the Indiana nonmetro labor markets' rates of employment growth were considerably less than those of comparable counties in the South. Third, and also unlike the South, Indiana counties in the 0-50 mile zone were superior to those in the more distant zone.

Returning to the initial hypothesis, it does not seem supported. Indiana nonmetro labor markets' employment growth was much less impressive than in the South and made less meaningful by the small number of nonmetro counties involved.

Since the overwhelming majority of Indiana nonmetro counties are within 50 miles of an SMSA (Tables D-1 and D-2), it seems worthwhile to compare the performance of all Indiana nonmetro counties with that of the SMSA's. First, nonmetro population growth rates are smaller. But to compare employment performance in nonfarm industries, population figures are too highly aggregative, since they reflect farm job changes as well. It is obvious that the decline of farm jobs has hit nonmetro counties far harder than it has affected the SMSA's. Secondly, when we turn to the more relevant figures -- nonfarm and manufacturing employment changes -- the superior performance (as judged by rates of growth) of nonmetro counties is obvious. Third, the tendency of manufacturing jobs to move (within SMSA's) from central city to suburban locations has often been remarked. What Table D-3 reveals is that manufacturing is decentralizing as well from SMSA counties to nonmetro locations. The gains of the nonmetro counties were greater absolutely, as well as relatively, in the 1960's.

Besides the hypothesis that nonmetro job growth would be small and insignificant compared to that of the SMSA's, it

---

[3]The Old Manufacturing Belt refers to the states of New England, the Middle Atlantic, and Upper Midwest -- from Massachusetts to Illinois -- where manufacturing activity has historically concentrated.

BEST COPY AVAILABLE

Table D-2

Population Changes in Indiana, 1960-1970, By Distance From Nearest SMSA and by Size of Main City

Category	Population 1960	Population 1970	Population Change, 1960-1970 Number	Percent
SMSA Counties	2,851,461	3,213,598	362,137	12.7
Counties 0-50 Miles from SMSA:				
Total	1,689,586	1,851,821	162,235	9.6
Main City Population More than 10,000	875,792	982,077	106,285	12.1
Main City Population 2,500-9,999	702,427	753,346	50,919	7.2
Main City Population Less than 2,500	111,367	116,398	5,031	4.5
Counties Over 50 Miles from SMSA:				
Total	121,631	128,250	6,619	5.4
Main City Population More than 10,000	93,756	97,827	4,071	4.3
Main City Population 2,500-9,999	27,875	30,423	2,578	9.1
Main City Population Less than 2,500	0	0		
All Nonmetro Counties:				
Total	1,811,217	1,980,071	168,854	9.3
Main City Population More than 10,000	969,548	1,079,904	110,356	11.3
Main City Population 2,500-9,999	730,302	783,769	53,467	7.3
Main City Population Less than 2,500	111,367	116,398	5,031	4.5

SOURCE: U.S. Department of Commerce, Bureau of Census, U.S. Census of Population, 1970 (Washington, D.C.: U.S. Government Printing Office).

0037

Table D-3

Industrialization in Indiana and the South, 1959-1969,
By Distance From the Nearest SMSA and by Size of the Largest City

Category	Number of Counties		Change In Population 1960-1970		Change In Nonfarm Employment 1959-1969		Change In Manufacturing Employment 1959-1969	
	Indiana	South	Indiana	South	Indiana	South	Indiana	South
SMSA Counties	25	153	12.7	22.4	28.4	49.7	15.1	43.7
Counties 0-50 Miles from SMSA:								
Total	62	595	9.6	8.6	47.1	48.3	51.6	52.5
Main City Population More than 10,000	17	127	12.1	12.2	50.7	48.7	53.4	51.3
Main City Population 2,500-9,999	34	287	7.2	5.9	40.1	48.0	46.2	53.0
Main City Population Less than 2,500	11	181	4.5	4.5	50.6	46.3	86.4	59.9
Counties Over 50 Miles from SMSA:								
Total	5	553	5.4	3.4	31.6	48.9	26.6	61.1
Main City Population More than 10,000	3	85	4.3	8.0	39.6	47.0	41.4	49.1
Main City Population 2,500-9,999	2	244	9.1	1.9	-4.3	50.0	-27.7	69.3
Main City Population Less than 2,500	0	224		-1.7		52.0		78.1
All Nonmetro Counties:								
Total	67		9.3		46.2		57.3	
Main City Population Over 10,000	20		11.3		49.9		52.7	
Main Ctiy Population 2,500-9,999	36		7.3		38.7		43.6	
Main City Population Less than 2,500	11		4.5		50.6		86.4	

SOURCE: United States Department of Commerce, Bureau of Census. County Business Patterns. Washington, D.C.: U.S. Government Printing Office, 1959, 1969.

0038

has also been held that employment growth rates of nonmetro counties would be directly proportional to the size of the main city of the county. The a priori reasoning for this is the same external economies argument referred to above. Table D-3 shows that this was not supported in the South. But it also shows that in Indiana the contrary is true, both for the "0 - 50 mile" and "over 50-mile" zones.

We may turn from state-wide growth patterns to examine Southern Indiana in particular (Table D-4). In general, the patterns referred to above occur in both the north and the south of the state. In particular, the SMSA and nonmetro counties whose main city had over 10,000 population in 1950 did better in the South than in the North. But in the nonmetro counties with smaller-sized main cities the results were opposite. This implies that growth rates in Southern Indiana were strongly and directly proportional to the size of the main city of the county. The smaller the county, the greater the tendency to stagnate. The 21 Southern Indiana nonmetro counties whose main city was less than 10,000 in population made very few net gains in manufacturing during the decade. This is in sharp contrast to the South.

Patterns of Industrial Structure

Next, we examine the questions: Which specific industries are important in nonmetro labor markets? Which are growing or declining? Do the patterns differ from those in the South?

Our attention is on Southern Indiana, since there most of the poverty is concentrated. First we will examine the structure in 1959; then, the changes in the 1960's. Comparisons will be made to nonmetro labor markets in the South.

First, we will inspect Indiana nonmetro counties more than 50 miles from an SMSA (Table D-5). On the SIC "one-digit" employment level, mining is relatively unimportant. Manufacturing, on the other hand, comprises over one-half of all non-farm jobs -- a considerably higher percentage than in the South. Looking within the key economic base sector of manufacturing (Table D-7) a similarity with the South immediately emerges on the SIC two-digit level: the apparel industry is important in both areas. However, the dissimilarities are more striking. Over one-half of manufacturing jobs in Southern Indiana are concentrated in the metal and metal-fabricating industries (SIC 33-37), an unimportant sector in the South

0093

Table D-4

Industrialization in Northern and Southern Indiana, 1959-1969,
By Distance From the Nearest SMSA and by Size of the Largest City

Category	Number of Counties		Change in Population 1960-1970		Change in Nonfarm Employment 1959-1969		Change in Manufacturing Employment 1959-1969	
	Northern Indiana	Southern Indiana	Northern Indiana	Southern Indiana	Northern Indiana	Southern Indiana	Northern Indiana	Southern Indiana
SMSA Counties	17	8	14.0	6.0	25.9	44.0	8.8	61.6
Counties 0-50 Miles from SMSA:								
Main City Population More than 10,000	12	5	9.8	19.8	48.6	58.0	51.0	62.6
Main City Population 2,500-9,999	17	15	8.1	6.0	45.2	31.8	53.6	33.9
Main City Population Less than 2,500	5	6	4.5	4.4	60.5	33.1	135.5	-1.1
Counties Over 50 Miles from SMSA:								
Main City Population More than 10,000	0	3		4.3		39.3		41.4
Main City Population 2,500-9,999	0	2		9.1		-4.3		-27.7
Main City Population Less than 2,500	0	0						

SOURCE: United States Department of Commerce, Bureau of Census. County Business Patterns. Washington, D.C.: U.S. Government Printing Office, 1959, 1969.

0100

BEST COPY AVAILABLE

Table D-5

Southern Indiana: Leading Industries, By Share of Total Nonfarm and Manufacturing Employment, 1959-1969, in Counties Over Fifty Miles from an SMSA

1959			1969			Change, 1959-1969		
SIC Number and Industry	Share		SIC Number and Industry	Share		SIC Number and Industry	Share	
	Percent	Number		Percent	Number		Percent	Number
Total nonfarm	100.0	18,717		100.0	24,632		100.0	5,915
-- Mining	2.2	404		0.7	181		-3.8	-223
-- Manufacturing	51.6	9,663		49.7	12,239		43.6	2,576
34 Fabricated Metals	17.1	1,665	23 Apparel	15.8	1,928	30 Rubber & Plastic	37.1	955
23 Apparel	15.3	1,475	37 Transportation Equipment	9.3	1,136	23 Apparel	30.7	453
32 Stone, Clay & Glass Products	13.4	1,293	32 Stone, Clay, & Glass	8.3	1,010	20 Food	7.1	183
37 Transportation Equipment	11.5	1,115	34 Fabricated Metals	8.2	1,002	24 Lumber	5.7	148
33 Primary Metals	10.2	981	30 Rubber & Plastic Products	7.8	955	35 Nonelectrical Machinery	4.5	115
35 Nonelectrical Machinery	6.6	635	35 Nonelectrical Machinery	6.1	750	27 Printing & Publishing	4.4	100
20 Food Products	5.7	554	20 Food	6.0	737	26 Paper	3.9	100

SOURCE: United States Department of Commerce, Bureau of Census. County Business Patterns 1959 and 1969. Washington, D.C.: U.S. Government Printing Office, 1959 and 1969.

0101

in 1959. In the latter area over one-half of the jobs are in apparel, lumber, food and textiles -- which, apart from apparel, are much less important in Indiana.

Turning to the changes in the 1960's, mining declined -- as in the South -- to an even smaller share of jobs. Manufacturing increased, but it was a less dynamic sector than in the South. There it grew at over twice the Indiana rate, and faster than the rate for total nonfarm employment. In Indiana it lagged behind the nonfarm growth rate.

Looking at the 1959-1969 changes at the SIC two-digit level, apparel gains were important as in the South. However, the metal and metal-fabricating industries that grew so rapidly in the South actually declined in Indiana nonmetro labor markets.

However, we have been comparing only five Indiana counties to the Southern nonmetro labor markets. If we compare the industrial structure of all Southern Indiana counties (Tables D-6 and D-7) to the Southern markets, what patterns emerge? At the two-digit level, the Indiana focus is again on the metal and metal fabricating industries. But apparel is relatively unimportant, while furniture is the third largest industry. Electrical and nonelectrical machinery are responsible for almost one-third of the jobs.

Comparing changes in the last decade for the two areas, Indiana mining declined as before, while manufacturing succeeded better in keeping up with the nonfarm job growth rate. Inspecting the SIC two-digit manufacturing level, the metal and metal-fabricating industries did very well in the 1960's (unlike in the "50 mile plus" Indiana counties). Together they were responsible for roughly one-half of the net gain of manufacturing jobs. Electrical machinery -- absent in the "50 mile plus" counties -- gained about one-third of all nonmetro manufacturing jobs. Also important were rubber and plastics and furniture (the latter was an insignificant industry in the more distant Indiana nonmetro group).

Conclusion

So far it has appeared that, as in Southern nonmetro labor markets, mining employment has decreased, while manufacturing has increased. However, in Indiana the increase of manufacturing was less dramatic than in the South, both in the size of the rate of growth and in comparison to nonfarm

BEST COPY AVAILABLE

Table D-6

Southern Indiana: Leading Industries, by Share of Total Nonfarm or Manufacturing Employment, 1959-1969, in All Nonmetro Counties

1959			1969			Change, 1959-1969		
SIC Number and Industry	Share		SIC Number and Industry	Share		SIC Number and Industry	Share	
	Percent	Number		Percent	Number		Percent	Number
Total Nonfarm	100.0	108,921		100.0	155,446		100.0	46,525
Mining	3.0	3,228		1.6	2,510		-1.5	-718
Manufacturing	50.8	55,363		51.6	80,201		53.4	24,838
36 Electrical Products	15.6	8,659	36 Electrical Products	20.3	16,273	36 Electrical Products	31.0	7,704
35 Nonelectrical Machinery	15.6	8,657	35 Nonelectrical Machinery	13.0	10,460	25 Furniture	11.6	2,889
25 Furniture	13.9	7,671	25 Furniture	12.7	10,160	30 Rubber & Plastic Products	10.3	2,568
32 Stone, Clay, & Glass Products	8.8	4,880	34 Fabricated Metals	7.1	5,672	33 Primary Metals	10.3	2,557
20 Food Products	7.6	4,195	20 Food Products	7.0	5,610	39 Miscellaneous Manufacturing	7.6	1,891
34 Fabricated Metals	6.9	3,815	33 Primary Metals	6.3	5,078	34 Fabricated Metals	7.5	1,857
33 Primary Metals	4.6	2,521	39 Miscellaneous Manufacturing	3.7	2,966	35 Nonelectrical Machinery	7.3	1,813

SOURCE: United States Department of Commerce, Bureau of Census. County Business Patterns. Washington, D.C.: U.S. Government Printing Office, 1959, 1969.

0103

Table D-7

Southern Indiana and the South: Comparative Industrial Structure of the South, of Indiana Counties Over 50 Miles from an SMSA, and of All Indiana Nonmetro Counties, by Selected Industries

SIC Number and Industry	1959 Indiana 50 Mile + Counties	1959 Indiana All Nonmetro Counties	1959 South	1969 Indiana 50 Mile + Counties	1969 Indiana All Nonmetro Counties	1969 South	Change, 1959-1969 Indiana 50 Mile + Counties	Change, 1959-1969 Indiana All Nonmetro Counties	Change, 1959-1969 South
Total Nonfarm	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
-- Mining	2.2	3.0	1.7	0.7	1.6	1.1	-3.8	-1.5	-0.7
-- Manufacturing	51.6	50.8	38.7	49.7	51.6	35.8	43.6	53.4	27.6
20 Food Products	5.7	7.6	11.0	6.0	7.0	8.4	7.1	5.7	4.3
22 Textiles	1.8	0.3	9.7	1.4	0.2	7.7	0.0	0.0	4.5
23 Apparel	15.3	3.8	17.7	15.8	3.7	20.2	17.6	3.5	24.2
24 Lumber	1.8	2.2	17.5	2.6	2.7	9.9	5.7	3.7	-2.2
25 Furniture	0.0	13.9	3.0	0.0	12.7	4.3	0.0	11.6	6.3
26 Paper	2.3	1.6	6.3	2.6	1.3	4.4	3.9	0.6	1.4
28 Chemicals	4.2	1.4	8.3	2.1	0.9	8.3	-5.9	-0.4	8.5
30 Rubber & Plastic	0.0	0.7	1.3	7.8	3.7	2.3	37.1	10.3	3.9
31 Leather	4.0	3.1	3.2	3.7	2.5	3.0	2.3	1.0	2.8
32 Stone, Clay & Glass Products	13.4	8.8	1.4	8.3	3.1	1.9	-11.0	-9.5	2.8
33 Primary Metals	10.2	4.6	1.8	4.4	6.3	2.4	-17.2	10.3	3.2
34 Fabricated Metals	17.1	6.9	1.6	8.2	7.1	2.4	-25.3	7.5	3.9
35 Nonelectrical Machinery	6.6	15.6	1.5	6.1	13.0	2.6	4.5	7.3	4.5
36 Electrical Machinery	0.0	15.6	1.6	0.0	20.3	5.9	0.0	31.0	12.7
37 Transportation Equipment	11.5	3.0	0.8	9.3	3.0	3.9	0.8	3.2	8.9

SOURCE: United States Department of Commerce, Bureau of Census. County Business Patterns. Washington, D.C.: U.S. Government Printing Office, 1959, 1969.

0104

job growth in general. At the two-digit level, the emphasis in Indiana was far more on metal and metal-fabricating industries than in the South, although changes in the South in the 1960's were shifting in that direction. It appears that for the first time, in the 1960's, the Southern nonmetro labor markets gained a healthy share of increases in industries which had long been important in nonmetro counties of Indiana. Apparel was important in nonmetro labor markets in both areas, revealing a tendency to seek locations distant from large cities. Rubber and plastic products (SIC 30) became important in both areas in the 1960's, especially in Indiana.

0105

BIBLIOGRAPHY

Books and Articles

Berry, Brian J. Spatial Organization and Levels of Welfare (paper prepared for the Economic Development Administration Research Conference). Washington, D.C.: February, 1968.

Bird, Alan. Migration and its Effect on Agriculture and Rural Development Potential. Washington, D.C.: U.S. Department of Agriculture, February, 1968.

Gray, Irwin. "New Industry in a Rural Area," Monthly Labor Review, XCII (June, 1969), pp. 26-30.

Hansen, Niles M. Rural Poverty and the Urban Crisis. Bloomington, Indiana: Indiana University, 1970.

Haren, Claude C. "Rural Industrial Growth in the 1960's" American Journal of Agricultural Economics, LII (August, 1970), pp. 431-37.

Hathaway, Dale E. and Perkins, Brian B. "Occupational Mobility and Migration from Agriculture," Rural Poverty in the United States (a report by the President's National Advisory Commission on Rural Poverty). Washington, D.C.: Government Printing Office, 1968, pp. 185-237.

Kentucky State Department of Commerce, "An Abundant Source of Labor" (available from Industrial Development Division). Frankfurt, Kentucky: Kentucky State Department of Commerce.

Marshall, Ray. Labor in the South. Cambridge, Mass: Harvard University Press, 1967.

McLaughlin, Glenn E. and Robock, Stefan. Why Industry Moves South. Washington, D.C.: National Planning Association Committe of the South, 1949.

Thompson, Wilbur. A Preface to Urban Economics (Baltimore: Johns Hopkins, 1965).

0106

Till, Thomas E. "The Extent of Industrialization in Southern Nonmetro Labor Markets in the 1960's," Journal of Regional Science, XIII (December, 1973), pp. 453-461.

_____. "Rural Industrialization and Southern Rural Poverty in the 1960's" (unpublished Ph.D. dissertation). Austin, Texas: University of Texas, 1972.

United States Department of Agriculture, Economic Research Service. Impact of Job Development on Poverty in Four Developing Areas (by John A. Kuehn, et al.). Agricultural Economic Report No. 225. Washington, D.C.: United States Department of Agriculture, June, 1972.

_____. Migrant Response to Industrialization in Four Rural Areas, 1965-1970. AER No. 270. Washington, D.C.: United States Department of Agriculture, September, 1974.

United States Department of Commerce, Bureau of Census. County Business Patterns, 1959, 1969, 1972. Washington, D.C.: Government Printing Office.

_____. Census of Manufacturers, 1947, 1954, 1958, 1963, 1967. Washington, D.C.: Government Printing Office.

_____. Census of Population, 1940, 1950, 1960, 1970. Washington, D.C.: Government Printing Office.

0107

Personal Interviews

Oscar W. Alford	District Supervisor, Louisiana State Employment Service Alexandria, Louisiana August 13, 1974
Owen S. (Sam) Ard	Industrial Development Coordinator Oklahoma State Department of Industrial Development Oklahoma City, Oklahoma June 6, 1974
Edyth Banks	Director, Operation Mainstream, Harlan County Community Action Agency Harlan, Kentucky August 2, 1974
Marjorie Baroni	Economic Development Committee Fayette, Mississippi May 23, 1974 August 14, 1974
Evelyn M. Bartlett	Director, Employment Security Bureau Cookeville, Tennessee October 11, 1974
Bookkeeper	Bell-Whitney Community Action Agency Pineville, Kentucky August 2, 1974
David Boykins	Assistant to the Mayor Alexandria, Louisiana August 13, 1974
Estle Bull	Assistant Director Employment Secuirty Bureau Fayetteville, Arkansas August 8, 1974
John Carr	Manpower Planner, Upper Cumberland Planning and Development District Cookeville, Tennessee October 11, 1974

0106

R. Dale Christy	Executive Vice-President Fayetteville Chamber of Commerce Fayetteville, Arkansas August 8, 1974
Dean Cotton	Director, Chamber of Commerce Corinth, Mississippi May 26, 1972 August 12, 1973
Lee Crean	Executive Director, OMD, Indiana Office of Manpower Development Indianapolis, Indiana September 17, 1974
Irlvn Cruthirds	Manager of Analysis and Forecast Section, Mississippi Research and Development Center Jackson, Mississippi May 24, 1972
John Dandy	Central Louisiana Community Action Program Alexandria, Louisiana August 13, 1974
Roy Dickerson	Research Coordinator, Director of Evaluation and Planning, Tennessee State Department of Economic and Community Development Nashville, Tennessee October 10, 1973
Rita Dixon	Local Office Supervisor, Harlan Bell Employment Service Harlan, Kentucky August 2, 1974
Bevon Dunlap	Executive Vice-President, Harrison Chamber of Commerce Harrison, Arkansas August 9, 1974
Robert East	Manpower Planner, First Tennessee-Virginia Development District Johnson City, Tennessee August 6, 1974

0109

Stan Edmond	Plant Manager, Southbridge Plastics Company Corinth, Mississippi August 13, 1973
Harold Edwards	Tennessee State Office of Economic Opportunity Nashville, Tennessee October 10, 1973
Charles Evers	Mayor Fayette, Mississippi May 23, 1972 August 14, 1974
Harry McFarland	Office of Manpower Development Indianapolis, Indiana January 9, 1974
Bert Fells	Director, Forrest-Stone Area Opportunities, Incorporated Hattiesburg, Mississippi August 16, 1974
William Forester	Director, Employment Security Bureau, Harlan, Kentucky August 2, 1974
Tom Fields	Director, Industrial Development Division Kentucky State Department of Commerce Frankfurt, Kentucky July 31, 1974
William Gardner	Deputy Director, Upper Eastern Tennessee Economic Opportunity Authority, Incorporated Kingsport, Tennessee August 6, 1974
Arthur George	Executive, Tyrone Hydraulics Company Corinth, Mississippi August 13, 1973

0110

Phil Grebe	Indiana State Industrial Board Indianapolis, Indiana January 9, 1974
Harold Hale	Supervisor of Career Development Employment Security Bureau Hattiesburg, Mississippi August 15, 1974 August 16, 1974
Charles Herron	Industrial Representative, Mississippi Agriculture and Industrial Board Jackson, Mississippi May 24, 1972
Jerry Hawthorne	Assistant Director, Natchez- Adams Chamber of Commerce Natchez, Mississippi May 24, 1972
Don Hieda	Research Director, Office of Manpower Development Indianapolis, Indiana September 17, 1974
Roby Howard	President, Farmer's State Bank Mountain City, Tennessee Letter of August 19, 1974
Cliff Ingram	Executive Director, LBJ & C Community Action Agency Monterey, Tennessee August 20, 1974
Charles Kirk	Director, Economic Development Commission New Albany, Indiana September 16, 1974
Victor Kirk	Alexandria, Louisiana August 13, 1974
Paul Lamberth	Assistant Staff Director, Tennessee State Manpower Council Nashville, Tennessee October 10, 1973

Tom Lancaster	Office of Research, Tennessee Department of Employment Security Bureau Nashville, Tennessee October 9, 1974 October 10, 1974
Eldon Leslie	Executive Director, Putnam County Chamber of Commerce Cookeville, Tennessee October 11, 1974
Lloyd Loftus	Director, Human Resources Agency Cookesville, Tennessee August 20, 1974
Miles Luke	Executive Director, Industrial Development Board Alexandria, Louisiana August 12, 1974
Al McKeighey	Mississippi Research and Development Center Jackson, Mississippi May 24, 1972
Roger A. Middleton	Executive Vice-President, Chamber of Commerce Woodward, Oklahoma June 7, 1974
Allen Neel	Regional Planner, Southwest Mississippi Economic Development District Hattiesburg, Mississippi August 15, 1974
Leslie Newcomb	Director, Southwest Mississippi Economic Development District Hattiesburg, Mississippi August 15, 1974
William L. Parkman	Executive Director, Southwest Mississippi Development District McComb, Mississippi May 24, 1972

0112

Krishan Paul	Systems Development Director, Division of Evaluation and Planning, Tennessee State Department of Economic and Community Development Nashville, Tennessee October 10, 1973
Reg W. Poorbaugh	Director, Research Division, Department of Development, Oklahoma State Oklahoma City, Oklahoma June 6, 1974
John Price	Director, Upper Eastern Tennessee Economic Opportunities Authority, Incorporated Kingsport, Tennessee August 6, 1974
Sherrie Reynolds	Researcher, First Tennessee-Virginia Development District Johnson City, Tennessee August 6, 1974
Charles R. Smith	Manager, Alcorn County Employment Security Bureau Corinth, Mississippi August 14, 1973
Billy Terhune	Kentucky Governor's Manpower Planning Staff Frankfurt, Kentucky July 31, 1974
Ronald Trout	Assistant Regional Planner, Kisatchie-Delta Regional Planning and Development District Alexandria, Virginia August 12, 1974
Ernie Wilkerson	Director of Tourism and Industrial Services, North West Arkansas Economic Development District Harrison, Arkansas August 9, 1974

0113

Dorothy Woodard	Deputy Director, Forrest-Stone Area Opportunity, Incorporated Hattiesburg, Mississippi August 16, 1974
John Woody	Labor Market Analyst, Tennessee Department of Employment Security Bureau Johnson City, Tennessee August 5, 1974
William Wright	Industrial Specialist, Central Louisiana Electric Company Alexandria, Louisiana August 12, 1974
Wendell Wray	Assistant Director, Indiana Office of Manpower Development Indianapolis, Indiana January 9, 1974
Don Young	Director, Ozark Opportunities, Incorporated Harrison, Arkansas August 9, 1974